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FATS AND OILS Situation

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U. S. DEPARTMENT OF AGRICULTURE

Table 1.--U.S. Fats and Oils Situation at a Glance

Item	Unit	Marketing year total or average		1971				1972	
		1969-70	1970-71 preliminary	January	February	November	December	January	February
SOYBEANS (Year beg. Sept.)									
U.S. average price received by farmers	$ bu.	2.35	2.85	2.86	2.92	2.84	2.93	2.92	3.00
U.S. support price	$ bu.	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Price, No. 1 yellow, Illinois points	$ bu.	2.53	3.00	2.99	3.01	2.98	3.06	3.05	3.14
Price, No. 2 yellow, f.o.b., Gulf	$ bu.	2.74	3.19	3.18	3.22	3.18	3.26	3.26	3.35
Price, No. 2 yellow, f.o.b., Baltimore	$ bu.	2.76	3.21	3.18	3.24	3.15	3.24	3.27	3.36
Receipts at mills	Mil. bu.	742.6	769.0	57.1	51.0	87.6	44.1	52.9	60.7
Crushings	Mil. bu.	737.3	760.2	67.7	60.1	59.8	64.0	63.9	59.4
Oil yield per bushel crushed	Lb.	10.65	10.83	10.70	10.88	10.77	10.79	10.80	10.84
Meal yield per bushel crushed	Lb.	47.35	47.37	47.41	47.68	47.11	47.48	47.20	47.54
Stocks at mills, end of month	Mil. bu.	33.4	42.3	152.6	143.5	146.9	127.1	116.1	117.5
Exports	Mil. bu.	432.6	433.2	35.1	33.0	47.4	50.3	42.4	35.5
SOYBEAN OIL (Year beg. Oct.)									
Production	Mil. lb.	7,904.4	8,264.7	724.8	653.2	644.2	690.6	689.9	643.2
Domestic disappearance	Mil. lb.	6,327.6	6,253.2	590.9	497.7	511.8	538.5	522.6	522.3
Exports	Mil. lb.	1,419.7	1,742.3	134.3	118.2	46.8	157.0	184.3	81.8
Stocks, end of month	Mil. lb.	543.4	772.6	751.8	787.8	808.7	802.2	782.8	822.0
Price, crude, Decatur	¢ lb.	11.2	12.8	12.3	12.1	12.5	11.7	10.9	11.0
SOYBEAN MEAL (Year beg. Oct.)									
Production	Thou. ton	17,596.5	18,035.2	1,605.4	1,431.6	1,408.7	1,519.4	1,507.1	1,411.0
Domestic disappearance	Thou. ton	13,514.2	13,406.0	1,108.7	1,113.7	1,115.9	1,000.5	1,102.0	1,040.3
Exports	Thou. ton	4,035.4	4,559.3	438.7	310.2	301.1	555.4	387.3	379.5
Stocks at mills, end of month	Thou. ton	137.0	145.8	185.5	189.3	192.8	144.3	153.9	135.1
Price, 44% protein, bulk, Decatur	$ ton	78.40	78.50	80.25	77.50	73.80	80.60	82.60	84.80
Price, 49-50% protein, bulk, Decatur	$ ton	86.60	84.30	86.10	82.40	79.20	88.50	89.40	91.50
COTTONSEED (Year beg. Aug.)									
U.S. average price received by farmers	$ ton	41.10	56.50	60.00	58.90	58.10	56.90	54.50	54.30
U.S. support price, basis grade	$ ton	37.00	37.00	37.00	37.00	1/	1/	1/	1/
Receipts at mills	Thou. ton	3,846.3	3,865.9	95.0	51.8	1,302.7	581.9	446.1	148.4
Crushings	Thou. ton	3,925.2	3,728.5	463.0	439.0	458.3	483.9	474.3	431.4
Stocks at mills, end of month	Thou. ton	80.4	217.8	1,786.4	1,399.2	1,868.3	1,966.2	1,938.0	1,654.9
COTTONSEED OIL (Year beg. Aug.)									
Production	Mil. lb.	1,281.9	1,210.9	151.5	141.2	149.0	154.0	151.0	137.5
Domestic disappearance	Mil. lb.	1,068.9	898.6	90.0	81.4	83.1	66.7	76.8	53.5
Exports	Mil. lb.	437.5	357.4	43.5	37.4	36.3	58.5	23.1	47.4
Stocks, end of month	Mil. lb.	213.9	167.2	202.3	224.6	159.5	188.3	239.4	276.0
Price, crude, Valley	¢ lb.	12.0	14.7	15.1	16.0	13.6	13.4	12.8	12.2
COMMERCIAL LARD (Year beg. Oct.)									
Production	Mil. lb.	1,810.4	2,029.0	176.6	138.6	168.0	162.0	131.0	100.0
Domestic disappearance	Mil. lb.	1,401.7	1,630.0	152.1	102.6	123.3	135.2	134.0	94.3
Exports	Mil. lb.	349.3	329.4	8.9	40.5	38.2	3.9	18.6	18.0
Shipments to U.S. Territories	Mil. lb.	55.3	52.7	7.4	.4	6.8	5.4	.3	N.A.
Stocks, end of month	Mil. lb.	59.8	76.9	90.7	85.8	82.4	99.9	78.1	65.8
Price, loose, tanks, Chicago	¢ lb.	11.6	11.1	9.5	10.0	10.6	9.8	9.6	11.3
CREAMERY BUTTER (Year beg. Oct.)									
Production	Mil. lb.	1,120.9	1,149.7	103.8	97.8	78.3	88.7	101.5	99.4
Domestic disappearance	Mil. lb.	1,098.7	1,074.0	104.4	82.4	[illegible]3.5	102.9	102.7	75.8
Stocks, end of month, total	Mil. lb.	171.3	222.0	119.3	134.1	155.0	96.8	79.1	89.3
Stocks, end of month, CCC	Mil. lb.	145.1	195.3	94.7	102.3	118.8	70.7	54.2	58.3
Price, 92-score, Chicago	¢ lb.	68.9	68.9	69.8	69.8	67.9	67.9	67.8	67.8
FLAXSEED (Year beg. July)									
U.S. average price received by farmers	$ bu.	2.65	2.40	2.31	2.33	2.27	2.37	2.41	2.42
U.S. support price, farm basis	$ bu.	2.75	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Price, No. 1, Minneapolis	$ bu.	2.90	2.66	2.58	2.62	2.64	2.71	2.70	2.74
Receipts at mills	Thou. bu.	15,945	19,596	1,269	1,043	863	1,091	1,087	1,778
Crushings	Thou. bu.	14,448	18,946	1,579	1,596	1,596	1,686	1,886	1,818
Exports	Thou. bu.	5,731	3,331	---	6	1	3	---	---
Stocks at mills, end of month	Thou. bu.	2,743	3,396	4,201	3,648	3,594	3,000	2,202	2,162
LINSEED OIL (Year beg. July)									
Production	Mil. lb.	292.5	381.8	31.9	32.4	32.3	33.3	38.2	36.5
Domestic disappearance	Mil. lb.	251.7	253.8	22.8	19.2	24.0	19.2	26.3	27.8
Exports	Mil. lb.	43.0	52.5	.1	.2	1.3	.1	.1	2/
Stocks, end of month	Mil. lb.	128.7	203.8	157.5	170.5	210.8	224.9	236.7	245.3
Price, raw, Minneapolis	¢ lb.	11.9	9.7	9.5	9.5	8.8	8.8	8.8	8.8
INEDIBLE TALLOW & GREASE (Year beg. Oct.)									
Production	Mil. lb.	4,830.5	5,251.7	434.5	401.7	415.7	431.2	458.7	397.4
Domestic disappearance	Mil. lb.	2,721.6	2,627.7	218.0	201.4	207.0	219.8	221.7	229.8
Exports	Mil. lb.	2,048.6	2,587.8	189.5	274.8	212.7	229.2	204.8	188.2
Stocks, end of month	Mil. lb.	369.5	409.7	423.5	349.6	397.4	379.7	411.8	391.2
Price, bleachable fancy, Chicago	¢ lb.	7.9	8.1	7.7	8.2	7.2	6.0	6.2	6.0
COCONUT OIL (Calendar year's 1970 and 1971)									
Production	Mil. lb.	247.1	N.A.	N.A.	N.A.	N.A.	N.A	N.A.	N.A.
Imports	Mil. lb.	594.7	628.6	129.2	41.7	28.2	16.1	22.0	144.6
Domestic disappearance	Mil. lb.	788.9	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Stocks, end of month	Mil. lb.	100.8	103.9	161.8	134.4	110.2	103.9	---	---
Price, crude, Pacific Coast	¢ lb.	16.3	13.6	15.8	14.5	12.1	11.2	10.6	9.9
PALM OIL (Calendar year's 1970 and 1971)									
Imports	Mil. lb.	140.9	226.9	11.0	24.6	37.6	17.6	42.3	37.6
Domestic disappearance	Mil. lb.	133.0	229.8	13.7	15.4	34.7	32.3	22.8	25.4
Stocks, end of month	Mil. lb.	42.9	39.9	40.2	49.5	54.6	39.9	59.4	71.5
Price, tankwagons, New York	¢ lb.	13.2	13.3	13.5	13.5	14.0	12.6	11.8	11.8
PEANUTS (Year beg. Aug.)									
U.S. average price received by farmers	¢ lb.	12.3	12.8	13.0	12.0	13.6	13.9	---	---
U.S. support price - Farmers' stock basis	¢ lb.	12.38	12.75	12.75	12.75	13.42	13.42	13.42	13.42
Millings, all types, Farmers' stock basis	Mil. lb.	2,267.9	2,615.9	297.7	257.9	299.7	328.5	316.3	325.8
Production of shelled edibles	Mil. lb.	1,284.8	1,373.1	154.2	123.9	164.6	170.2	159.8	139.5
Total edible uses - shelled basis	Mil. lb.	1,060.6	1,065.3	88.1	84.1	92.9	86.0	90.3	88.6
Crushings - shelled basis	Mil. lb.	437.1	600.9	60.2	58.2	59.7	63.9	68.5	60.3
Commercial stocks, end of month - FS	Mil. lb.	352.7	453.2	1,892.6	1,645.0	2,366.7	2,125.0	1,844.6	1,616.1
CCC stocks, end of month - FS	Mil. lb.	---	---	402.0	219.3	721.2	550.6	375.0	177.0
PEANUT OIL (Year beg. Aug.)									
Production	Mil. lb.	182.0	253.5	25.4	24.6	25.4	26.5	28.5	25.4
Domestic disappearance	Mil. lb.	154.5	193.1	18.5	13.0	13.1	19.1	22.7	14.8
Exports	Mil. lb.	35.8	43.9	3.9	2.4	16.4	12.8	5.1	7.8
Stocks, end of month	Mil. lb.	25.3	41.8	18.3	27.4	21.7	16.2	17.0	19.7
Price, crude, Southeast mills	¢ lb.	14.9	17.1	17.6	18.2	16.2	16.8	16.1	15.4

1/ No support announced. 2/ Less than 50,000 pounds. N.A.--Not available.

THE FATS AND OILS SITUATION

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SUMMARY

The soybean supply-demand balance will continue tight for the marketing year beginning September 1, although supplies may increase 3 to 4%, based on current cropping intentions.

Farmers indicated March 1 they would plant a record 45½ million acres to soybeans this year. This is about 2 million more than in 1971. If yields are on trend, this year's production would total around 1¼ billion bushels, compared with 1.169 billion bushels last year. Thus, soybean supplies for 1972/73 (including next September's estimated 70-million bushel carryover) would total slightly over 1.3 billion bushels, up from the 1.268 billion for the current season but below the 1.354 billion of last season.

Current soybean supplies are reducing total soybean disappearance about 4% this marketing year to 1.2 billion bushels. Farmers' prices will remain strong as supplies are limited relative to domestic and export demand. Prices this marketing year have averaged a little under $3 per bushel and they probably will strengthen further as current supplies decline.

Soybean crushings have slowed, and through March were running about 5% behind 1970/71. The reduction reflects higher bean prices, lagging domestic and export demand for soybean oil, and smaller processing margins. And with limited supplies, crushings for all of 1971/72 may total around 720 million bushels compared with 760 million last year.

Export demand for soybeans stays strong, primarily because of the meal demand, but the exportable supply is smaller this year and prices are higher. Soybeans inspected for export from last September through March 24 totaled 259 million bushels, about the same as a year ago. This heavy movement partly reflected uncertainties over longshoremen strikes at East Coast and Gulf Coast ports. Reduced supplies probably will force exports below year-earlier levels this spring and summer. For all of 1971/72 they may total around 415 million bushels, down a little from the 433 million in 1970/71.

Soybean oil prices (crude, Decatur) dropped from 14½ cents per pound last August to 11 cents in January-February. Prices increased to about 12 cents this March and are near year-ago levels.

Domestic use of soybean oil during October-February was down 1%. Use of cottonseed oil was off a fifth, and lard also declined but consumption of imported palm oil rose. Some increase in soybean oil use is expected over

year-ago levels this spring and summer. For all of 1971/72 domestic offtake may total about 6.4 billion pounds, a shade above last season.

While exports of soybean oil through February were about the same as a year earlier, they are expected to fall sharply the rest of the marketing year. Export prospects have been dampened this year; commercial exports have been hit by intensive foreign competition and P.L. 480 movement has been reduced by the India-Pakistan war last December. These 2 countries accounted for about one-third of the 1.7 billion pounds we exported last marketing year. Soybean oil exports for all of 1971/72 are now forecast at around 1.3 billion pounds, sharply below 1970/71 but slightly higher than indicated earlier. The revised outlook reflects the prospective shipment of soybean oil to Bangladesh—50,000 tons authorized so far for delivery this year.

Soybean meal prices (44% protein, Decatur) rose from $73 per ton last September to $91 this March. This was $14 per ton above March 1971. Demand continues strong. But with reduced soybean meal supplies, domestic use for all of 1971/72 may be limited to around 13 million tons (it was 13½ million last year) and exports to around 4 million tons (4½ million last year).

SITUATION AND OUTLOOK

Large Oilseed Acreage

Based on the March 1 USDA survey of farmers' intentions, acreage planted to the 4 major U.S. oilseed crops in 1972 will total about 62 million acres, 5% above last year (table 2).

Soybean producers intend to plant a record acreage for the 12th consecutive year—45½ million acres, 2.3 million or 5% more than in 1971. In the 27 States also surveyed in January, prospective acreage as of March 1 was up 2% from January 1. All regions of the Nation expect increases. An estimated 44.4 million acres of soybeans will be harvested for beans if growers plant the intended acreage and the proportion harvested for beans is about normal. If yields are average, allowing for slight uptrend, 1972 production would be a record 1¼ billion bushels, compared with 1,169 million last year.

Cotton growers intend to plant 13½ million acres in 1972, about 10% above 1971. The 1972 national upland cotton base acreage allotment is 11.5 million acres, the same as last year. Increased acreage is expected in all regions this year. If these intentions materialize and yields are average, cottonseed supplies would increase substantially in the 1972/73 marketing year. In the 14 upland cotton States also surveyed on January 1, acreage is 2% more than earlier intended.

Flaxseed farmers intend to cut their 1972 seedings to 1.3 million acres, about a fifth below last year. The major producing States expect sharp acreage declines—Minnesota, 26%; North Dakota, 24%; and South Dakota, 12%. The sharp decreases indicated this March were expected since the January intentions report had indicated a drop of 19%. If present planting intentions are realized and yield per acre is average, allowing for trend, the 1972 crop would total 16 million bushels, 16% less than last year and the smallest crop since 1938.

Peanut growers intend to plant 1.5 million acres, roughly the same as a year ago. Peanuts are under acreage controls and the national allotment has been held at the legal minimum of 1.6 million acres each year since 1956. If peanut farmers follow their intentions, as they usually do, and yields are on trend the 1972 peanut crop will be around 3.1 billion pounds. Production was 3 billion pounds last year.

Castorbean Program Discontinued

USDA announced February 8 that there will be no support program for 1972-crop castorbeans. Producers indicated that use of a 1972 support program—unless the loan level were substantially increased—would not be as desirable as would the opportunity of planting the beans on acreage set-aside from production of cotton, feed grain, or wheat. USDA had earlier announced that castorbeans could be planted as an alternate crop on set-aside acreage, with a reduction in payment related to a farm's productivity.

There has been a decline in acreage in recent years. For 1971, there were an estimated 4,500 acres planted to castorbeans compared with 16,000 in 1970; 30,000 in 1969 and 70,000 in 1968. In the 1971 program, there were 120 farms planting 3,390 acres of castorbeans on set-aside land. Producers are expected to increase this acreage in 1972, possibly to about 10,000. Center of castorbean production has been in the Plainview, Tex. region.

SOYBEANS

Tops in Cash Receipts

In 1971 cash receipts from soybean marketings reached a record $3.4 billion, a fifth above 1970. This was the first time soybeans equaled corn in cash receipts, tying for the No. 1 spot. Projections for 1972 indicate that soybeans will surpass corn to become the Nation's leading cash crop.

These comparisons are based solely on cash receipts from sales. They do not take into consideration the substantial amount of government payments on corn, wheat and cotton. Furthermore, the comparison ignores the fact that only about 55% of the corn crop is sold; the balance is used on the farms where grown.

Table 2.--Oilseeds: Prospective plantings for 1972 (based on March intentions of farmers) with comparisons, 1950-72

Year	Soybeans				Cottonseed			
	Acreage		Production		Cotton acreage		Cottonseed production	
	Planted 1/	Harvested for beans	Per acre harvested	Total	Planted	Harvested	Per acre harvested	Total
	1,000 acres	1,000 acres	Bushels	Million bushels	1,000 acres	1,000 acres	Pounds	1,000 tons
1950	15,048	13,807	21.7	299.2	18,866	17,843	460	4,105
1951	15,176	13,615	20.8	283.8	29,353	26,949	467	6,302
1952	15,958	14,435	20.7	298.8	28,065	25,921	478	6,191
1953	16,394	14,829	18,2	269.2	26,872	24,341	554	6,749
1954	18,541	17,047	20.0	341.1	20,052	19,251	593	5,709
1955	19,674	18,620	20.1	373.7	17,991	16,928	714	6,043
1956	21,700	20,620	21.8	449.3	17,077	15,615	693	5,407
1957	21,938	20,857	23.2	483.4	14,310	13,558	680	4,609
1958	25,108	23,993	24.2	580.2	12,379	11,849	810	4,798
1959	23,349	22,631	23.5	532.9	15,833	15,117	793	5,991
1960	24,440	23,655	23.5	555.3	16,080	15,309	769	5,886
1961	27,787	27,003	25.1	678.6	16,588	15,634	765	5,978
1962	28,418	27,608	24.2	669.2	16,293	15,569	789	6,139
1963	29,462	28,615	24.4	699.2	14,843	14,212	871	6,192
1964	31,605	30,793	22.8	700.9	14,835	14,055	888	6,237
1965	35,227	34,449	24.5	845.6	14,152	13,615	894	6,087
1966	37,294	36,546	25.4	928.5	10,349	9,552	829	3,960
1967	40,776	39,767	24.5	976.1	9,448	7,997	803	3,210
1968	42,037	41,104	26.8	1,103.1	10,912	10,160	913	4,640
1969	42,198	40,982	27.5	1,126.3	11,882	11,055	736	4,068
1970	42,945	42,056	26.7	1,123.7	11,945	11,160	733	4,093
1971 2/	43,176	42,409	27.6	1,169.4	12,351	11,463	764	4,381
1972 3/	45,489	44,400		1,244	13,529			

Year	Flaxseed				Peanuts				Total 4 oilseeds
	Acreage		Production		Acreage		Production		
	Planted	Harvested	Per acre harvested	Total	Planted 1/	Harvested for nuts	Per acre harvested	Total	Acreage planted
	1,000 acres	1,000 acres	Bushels	Million bushels	1,000 acres	1,000 acres	Pounds	Million pounds	Million acres
1950	4,274	4,090	9.8	40.2	2,633	2,262	900	2,035	40.8
1951	4,116	3,904	8.9	34.7	2,510	1,982	837	1,659	51.2
1952	3,445	3,304	9.1	30.2	1,838	1,443	940	1,356	49.3
1953	4,759	4,570	8.2	37.7	1,796	1,515	1,039	1,574	49.8
1954	5,947	5,663	7.3	41.3	1,824	1,387	727	1,008	46.4
1955	5,148	4,914	8.2	40.4	1,882	1,669	928	1,548	44.7
1956	5,786	5,473	8.6	47.0	1,834	1,384	1,161	1,607	46.4
1957	5,481	4,793	5.2	25.1	1,746	1,481	969	1,436	43.5
1958	3,862	3,679	10.2	37.4	1,702	1,516	1,197	1,814	43.1
1959	3,268	2,932	7.2	21.2	1,576	1,435	1,061	1,523	44.0
1960	3,437	3,342	9.1	30.4	1,526	1,395	1,232	1,718	45.5
1961	2,975	2,514	8.8	22.2	1,524	1,398	1,185	1,657	48.9
1962	3,102	2,808	11.5	32.2	1,507	1,400	1,228	1,719	49.3
1963	3,379	3,172	9.8	31.0	1,498	1,396	1,391	1,942	49.2
1964	2,965	2,825	8.6	24.4	1,487	1,397	1,502	2,099	50.9
1965	2,868	2,775	12,8	35.4	1,517	1,435	1,661	2,384	53.8
1966	2,679	2,576	9.1	23.4	1,488	1,418	1,700	2,410	51.8
1967	2,061	1,975	10.1	20.0	1,472	1,402	1,765	2,473	53.8
1968	2,183	2,098	12.9	27.1	1,493	1,436	1,771	2,543	56.6
1969	2,673	2,616	13.4	35.1	1,507	1,451	1,743	2,529	58.3
1970	3,004	2,888	10.4	30.0	1,518	1,467	2,031	2,979	59.4
1971 2/	1,662	1,580	11.8	18.7	1,532	1,463	2,045	2,992	58.7
1972 3/	1,305			16	1,537			3,099	61.9

1/ Acreage grown alone for all purposes. 2/ Preliminary. 3/ Indicated March 1.

Table 3.--Oilseeds: Price support levels and season average prices received by farmers, 1949-72

Crop of--	Soybeans			Cottonseed			Peanuts (farmers' stock)			
	Level of support		Season average prics per bushel received by farmers	Level of support		Season average price per ton received by farmers	Level of support			Season average price per pound received by farmers
								Price		
	Percent of parity	Price per bushel		Percent of parity	Price per ton 1/		Percent of parity	Per ton	Per pound	
	Percent	Dollars	Dollars	Percent	Dollars	Dollars	Percent	Dollars	Cents	Cents
1949	90	2.11	2.16	90	46.50	43.40	90	210.00	10.5	10.4
1950	80	2.06	2.47	73	47.00	86.60	90	216.00	10.8	10.9
1951	90	2.45	2.73	90	61.50	69.30	88	230.56	11.5	10.4
1952	90	2.56	2.72	90	62.40	69.60	90	239.40	12.0	10.9
1953	90	2.56	2.72	75	50.50	52.70	90	237.60	11.9	11.1
1954	80	2.22	2.46	75	50.00	60.30	90	244.80	12.2	12.2
1955	70	2.04	2.22	65	42.00	44.60	90	244.80	12.2	11.7
1956	75	2.15	2.18	70	44.00	53.40	86	227.04	11.4	11.2
1957	69	2.09	2.07	65	42.00	51.10	81	221.40	11.1	10.4
1958	69	2.09	2.00	65	41.00	43.80	81	213.20	10.7	10.6
1959	64	1.85	1.96	57	34.00	38.80	75	193.50	9.7	9.6
1960	64	1.85	2.13	57	34.00	42.60	79	201.24	10.1	10.0
1961	80	2.30	2.28	79	45.00	51.10	86	221.00	11.0	10.9
1962	76	2.25	2.34	76	44.00	47.90	82	221.40	11.1	11.0
1963	75	2.25	2.51	2/70	44.00	50.70	80	224.00	11.2	11.2
1964	74	2.25	2.62	70	44.00	47.10	79	224.00	11.2	11.2
1965	74	2.25	2.54	68	43.00	46.70	77	224.00	11.2	11.4
1966	78	2.50	2.75	74	48.00	65.90	77	227.00	11.4	11.3
1967	76	2.50	2.49	70	48.00	55.20	75	227.00	11.4	11.4
1968	73	2.50	2.43	69	48.00	50.50	77	240.25	12.0	11.9
1969	62	3/2.25	2.35	50	37.00	41.10	76	247.50	12.4	12.3
1970	61	2.25	2.85	50	37.00	4/56.50	75	255.00	12.8	4/12.8
1971	59	2.25	4/2.96	No Program	No Program	4/57.60	75	268.50	13.4	4/13.6
1972	56	2.25								

Crop of--	Flaxseed			Tung nuts				Castorbeans (hulled basis)			
	Level of support		Season average prics per bushel received by farmers	Level of support			Season average price per ton received by farmers for tung nuts	Level of support			Estimated average price per pound received by farmers for castorbeans
				Nuts		Oil		Beans		CCC oil purchase price	
	Percent of parity	Price per bushel 6/		Percent of parity	Price per ton	Price per pound		Percent of parity	Price per pound	Price per pound	
	Percent	Dollars	Dollars	Percent	Dollars	Cents	Dollars	Percent	Cents	Cents	Cents
1949	90	3.74	3.63	60	60.00	24.1	63.70		No Program		
1950	60	2.57	3.34	60	63.00	25.1	111.00		No Program		
1951	60	2.65	3.72	60	67.20	26.5	106.00		7/10.0		10.0
1952	80	3.77	3.73	62	67.20	26.5	79.80		10.0		10.0
1953	80	3.79	3.64	65	63.38	23.9	66.80		9.0		9.0
1954	70	3.14	3.05	60	54.96	21.2	59.40		6.0		6.0
1955	65	2.91	2.90	60	51.06	20.0	64.00		No Program		
1956	70	3.09	2.99	65	53.76	21.0	53.40		"		
1957	64	2.92	2.94	65	52.13	20.5	52.30		"		
1958	64	2.78	2.69	65	53.89	21.0	53.20		"		
1959	60	2.38	3.00	65	53.50	20.9	52.40		"		
1960	62	2.38	2.65	66	53.50	20.9	62.50		"		
1961	74	2.80	3.26	82	63.34	24.0	87.30		"		
1962	76	2.90	2.83	84.5	63.34	24.0	122.00		"		
1963	75	2.90	2.76	75	63.34	24.0	65.50		"		
1964	76	2.90	2.82	72.6	63.34	24.0	61.70		"		
1965	75	2.90	2.80	69.8	63.34	24.0	60.50		"		
1966	73	2.90	2.89	68.2	63.34	24.0	57.90		"		5.0
1967	73	2.90	2.95	68.1	63.34	24.0	66.10		No Program		5.5
1968	72	2.90	2.81	65	64.22	24.3	67.00	8/74	5.5	9/14.75	5.5
1969	64	2.75	2.65	65	68.25	25.6	61.40	52	4.0	---	4.5
1970	58	2.50	2.40	65	70.85	26.4	66.60	58	4.5	---	5.0
1971	57	2.50	4/ 2.33	65	73.45	27.2	5/70	57	4.5	---	5.0
1972	58	2.50							No Program		

1/ Purchase price, basis grade except 1949 which is average grade. 2/ Beginning 1963 based on purchase price. Earlier years based on loan price. 3/ Beginning 1969, No. 1 grade soybeans; prior years No. 2 grade. 4/ Preliminary. 5/ ERS estimate. 6/ Farm basis. 7/ The castorbean production and procurement programs of 1951-54 provided for payment to the farmer of a minimum price or the market price for his castorbeans, whichever was the higher. 8/ The parity price concept was not used until the price support programs of 1968 to date. 9/ F.O.B. oil mills.

Cash receipts from marketing crops[1]

Crop	Calendar year					
	1969		1970		1971[2]	
	Rank	Value	Rank	Value	Rank	Value
	No.	*Bil. dol.*	*No.*	*Bil. dol.*	*No.*	*Bil. dol.*
Corn	1	2.8	1	3.0	[1	3.4] tie
Soybeans	2	2.6	2	2.8	[	3.4]
Wheat	3	1.7	3	1.6	3	2.0
Tobacco	4	1.3	4	1.4	4	1.3
Cotton lint	5	1.2	5	1.0	5	1.2

[1] Excludes government payments. [2] Preliminary.

Farm Prices About $3

Farmers' prices for soybeans will continue strong as supplies are limited relative to domestic and export demand. They will be influenced by prospects for the 1972 soybean crop later in the year. The influence of crop prospects on prices will be limited, however, unless acreage or yields differ substantially from expectations. The season average price for 1971-crop soybeans is estimated at $3 per bushel, the highest since the $3.33 in 1947-48. So far farm prices have advanced from $2.84 per bushel last November to $3.20 this March, averaging a little under $3. They probably will strengthen further as soybean supplies decline.

Through February, growers put 167 million bushels of soybeans under price support loan compared with 143 million during this period a year ago. About 26 million bushels have been redeemed, leaving a net 141 million still under loan. Many farmers placed soybeans under government loan (taking advantage of CCC's low interest rates) to await further market developments. Producers can receive price support loans on their 1971-crop soybeans at national average rate of $2.25 per bushel (No. 1 grade, 12.8-13.0% moisture), unchanged from 1970. Farm and warehouse loans and CCC purchases are available through May 31, 1972. While loan activity in 1971/72 is substantial, no CCC acquisitions are anticipated. There will be no reseal program for 1971-crop soybeans.

Soybean Supplies Down 6%

Soybean supplies for the current marketing year are 1,268 million bushels, compared with 1,354 million in 1970/71. The decline in carryover last September 1 more than offset the increase in production. The 1971 soybean crop was a record 1,169 million bushels, 4% larger than the 1970 crop.

Reduced supplies this marketing year are holding soybean usage to 1.2 billion bushels, about 4% below 1970/71. This is the third straight year in which use will exceed production. As a result, carryover next September 1 probably will be drawn down to minimum operating levels—possibly around 70 million bushels compared with nearly 100 million last year. This is equal to about a 3 weeks' supply for September and would provide little or no protection from any possible delay in availability of new-crop soybeans.

Crush Off; Margins Decline

Soybean crushings this marketing year are lagging the 1970/71 rate by about 5%. For the entire year they are estimated at around 720 million bushels, down from last year's record 760 million.

Soybean crushings

Month	1970/71		1971/72	
	Monthly	Cumulative	Monthly	Cumulative
	Million bushels	*Million bushels*	*Million bushels*	*Million bushels*
September	53.3	53.3	54.5	54.5
October	66.8	120.1	59.5	114.0
November	65.9	186.0	59.8	173.8
December	68.1	254.1	64.0	237.8
January	67.7	321.8	63.9	301.7
February	60.1	381.9	59.4	361.0
March	63.6	445.5	[1] 63	424
April-August	314.6		[1] 296	
Year	760.1		[1] 720	

[1] Estimate.

The reduced soybean crush reflects higher soybean prices and smaller processing margins. During September-March, margins averaged 11 cents per bushel compared with 31 cents in the same months a year ago and 56 cents in 1969/70. Increased crushing capacity along with reduced supplies of soybeans likely will keep pressure on margins.

Spot soybean processing margins[1]

Month	Average 1960-68	1969/70	1970/71	1971/72
	Cents per bushel	*Cents per bushel*	*Cents per bushel*	*Cents per bushel*
September	28	37	47	14
October	20	61	45	19
November	16	45	36	11
December	11	56	38	11
January	10	59	25	8
February	10	77	16	7
March	8	53	15	[2] 5
Annual average	12	48	26	

[1] Spot price spreads calculated from simple average monthly cash prices of soybeans, oil and meal at Decatur, using Census monthly yields of oil and meal per bushel crushed. [2] Estimated.

Soybean Exports Near Last Year's Rate

Soybean exports through March were about the same as in 1970/71. Export demand for soybeans stays strong, primarily because of meal demand, but U.S. supplies available for shipment are down this year and prices are higher. Reduced supplies probably will force exports below year-earlier levels this spring and summer. For all of 1971/72 they may total around 415 million bushels, down a little from the 433 million in 1970/71.

Table 4.--Soybeans: Prospective plantings for 1972 with comparisons, by States and areas, crop years, 1969-72

State and areas	Acreage planted: Actual 1969	Acreage planted: Actual 1970	Acreage planted: Actual 1971 1/	Acreage planted: Indicated 1972 2/	Acreage harvested 1969	Acreage harvested 1970	Acreage harvested 1971 1/	Acreage harvested: Indicated 1972 2/	Production 1969	Production 1970	Production 1971 1/	Production: Indicated 1972 2/
	-- 1,000 acres --				-- 1,000 acres --				-- Million bushels --			
North Carolina	1,000	981	1,059	1,175	885	867	936		23.5	20.8	22.5	
South Carolina	992	1,023	1,084	1,190	959	988	1,047		21.6	20.3	22.5	
Georgia	514	550	660	750	467	528	635		11.2	11.9	16.2	
Albama	683	642	700	750	641	609	662		14.7	14.3	17.5	
Total Southeast	3,189	3,196	3,503	3,865	2,952	2,992	3,280		71.0	67.3	78.7	
Kentucky	520	582	768	960	485	558	742		13.6	15.1	21.9	
Tennessee	1,268	1,281	1,371	1,494	1,193	1,217	1,302		28.6	28.0	33.9	
Mississippi	2,357	2,358	2,429	2,400	2,290	2,313	2,359		50.4	55.5	54.3	
Arkansas	4,307	4,393	4,305	4,180	4,228	4,313	4,266		86.7	97.0	91.7	
Louisiana	1,696	1,730	1,695	1,750	1,608	1,688	1,644		30.6	38.0	37.8	
Total South Central	10,148	10,344	10,568	10,784	9,804	10,089	10,313		209.9	233.6	239.5	
Ohio	2,380	2,434	2,507	2,682	2,344	2,414	2,494		68.0	68.8	76.1	
Indiana	3,333	3,300	3,400	3,705	3,311	3,278	3,377		107.6	101.6	113.1	
Illinois	6,846	6,848	7,190	7,250	6,730	6,800	7,150		225.5	210.8	236.0	
Iowa	5,632	5,709	5,456	5,838	5,450	5,680	5,440		179.8	184.6	174.1	
Missouri	3,252	3,546	3,652	3,800	3,150	3,465	3,605		81.9	88.4	97.3	
Minnesota	3,101	3,140	2,889	3,149	3,068	3,099	2,851		75.2	82.1	65.6	
Total Eastern Corn Belt	24,551	24,977	25,094	26,424	24,053	24,736	24,917		738.0	736.3	762.1	
North Dakota	188	184	211	205	185	181	208		3.0	2.7	2.9	
Soutb Dakota	256	253	243	255	243	247	240		6.0	4.3	5.0	
Nebraska	777	824	650	800	766	812	640		25.7	17.9	16.0	
Kansas	866	1,074	880	930	852	1,005	871		19.6	15.1	17.9	
Total Western Corn Belt	2,087	2,335	1,984	2,190	2,046	2,245	1,959		54.3	40.0	41.8	
All other 3/	2,223	2,093	2,027	2,226	2,127	1,994	1,940		53.1	46.6	47.2	
United States	42,198	42,945	43,176	45,489	40,982	42,056	42,409	44,400	1,126.3	1,123.7	1,169.4	1,244

1/ Preliminary. 2/ March 1 indications. 3/ New York, New Jersey, Pennsylvania, Michigan, Wisconsin, Deleware, Maryland, Virginia, Florida, Oklahoma and Texas.

Table 5.--Soybeans: Supply, disposition, acreage and price, 1960-72

Item	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971 1/	1972 2/
	Year beginning September												
							Supply and Disposition (Million bushels)						
Supply													
Stocks, September 1 3/	51.8	27.1	78.3	46.0	67.3	29.7	35.6	90.1	166.3	324.4	230.1	98.9	70
Production	555.1	678.6	669.2	699.2	700.9	845.6	928.5	976.1	1,103.1	1,126.3	1,123.7	1,169.4	1,244
Total supply	606.9	705.7	747.5	745.2	768.2	875.3	964.1	1,066.2	1,269.4	1,450.7	1,353.8	1,268.3	1,314
Disposition													
Crushings	406.1	431.4	472.8	436.8	479.0	537.5	559.4	576.4	605.9	737.3	760.2	720	
Exports	134.7	149.4	180.5	187.2	212.2	250.6	261.6	266.6	286.8	432.6	433.2	415	
Seed	32.5	33.3	34.6	36.0	40.3	42.9	47.1	47.8	47.7	48.9	52.0		
Feed	1.3	1.3	1.1	.9	.9	.9	1.0	.9	.8	.9	.8	63	
Residual	5.2	12.0	12.5	17.0	6.1	7.8	4.9	8.2	3.8	.9	8.7		
Total disposition	579.8	627.4	701.5	677.9	738.5	839.7	874.0	899.9	945.0	1,220.6	1,254.9	1,198	
Stocks, August 31 3/	27.1	78.3	46.0	67.3	29.7	35.6	90.1	166.3	324.4	230.1	98.9	70	
							Acreage and Yield (Million acres)						
Acreage planted	24.4	27.8	28.4	29.5	31.6	35.2	37.3	40.8	42.0	42.2	42.9	43.2	45.5
Acreage harvested for beans	23.7	27.0	27.6	28.6	30.8	34.4	36.5	39.8	41.1	41.0	42.1	42.4	44.4
Percent harvested (%)	97.1	97.1	97.2	96.9	97.2	97.7	97.9	97.5	97.9	97.2	98.1	98.1	
							(Bushels)						
Yield per acre harvested	23.5	25.1	24.2	24.4	22.8	24.5	25.4	24.5	26.8	27.5	26.7	27.6	
							Price (Dollars)						
Price per bushel													
Support (U.S. farm basis)	1.85	2.30	2.25	2.25	2.25	2.25	2.50	2.50	2.50	4/2.25	2.25	2.25	2.25
Received by farmers	2.13	2.28	2.34	2.51	2.62	2.54	2.75	2.49	2.43	2.35	2.85	2.96	
No. 1 yellow, Ill. Pts.	2.53	2.41	2.50	2.59	2.81	2.91	2.86	2.61	2.54	2.53	3.00		
No. 1 yellow, Chicago	2.60	2.49	2.59	2.67	2.88	2.98	2.93	2.69	2.63	2.61	3.05		

1/ Preliminary. Disposition is forecast. 2/ Forecast. Acreage and production based on March 1 planting intentions. 3/ Estimates prior to 1965. 4/ Beginning 1969 No. 1 grade soybeans. Prior years No. 2 grade. Differential between No. 1 grade and No. 2 about 5¢ per bushel.

Soybean exports[1]

Month	1970/71		1971/72	
	Monthly	Cumulative	Monthly	Cumulative
	Million bushels	*Million bushels*	*Million bushels*	*Million bushels*
September . . .	29.9	29.9	29.2	29.2
October	44.0	73.9	29.4	58.6
November . . .	45.3	119.2	47.4	106.0
December . . .	46.9	166.1	50.3	156.3
January	35.1	201.2	42.4	198.7
February	33.0	234.2	35.5	234.2
March	35.1	269.3	[2] 35	269
April-August .	163.9		[2] 146	
Year	433.2		[2] 415	

[1] Census data. [2] Estimated.

U.S. soybeans and oil are encountering more foreign competition this year. Total world production of oils and fats in calendar 1972 is forecast to rise 4% to a record 43 million metric tons. This expected sharp increase reflects foreign producer response to above-average prices for vegetable oils. World prices picked up in late 1969, continued strong throughout 1970, and peaked in 1971. Output of edible vegetable oils, including palm oils, in 1972 may rise 8% over 1971.

USDA Sales Policy for Soybeans

Starting September 1, USDA will sell any soybeans owned or acquired for unrestricted use at the market price but not less than the 1971 loan rate, where stored, plus markups. The Agricultural Act of 1970 provides that the minimum price for grains shall be not less than 115% of the national average loan rate plus reasonable carrying charges. Current law does not specify minimum prices for soybeans and other oilseeds for the extraction of oil.

As in 1971, the minimum prices for the first 3 months will be the same as for the fourth month. Prices will increase by 1½ cents per bushel carrying charges (unchanged from 1971) from the fifth through the tenth month of the marketing year, and then continue the same for the eleventh and twelfth months.

CCC minimum sales prices for soybeans, 1972/73[1]

Month	In-store basis	At ports			
		Duluth-Superior	Other Great Lake	Gulf	East Coast
	Dollars per bushel	*Dollars per bushel*	*Dollars per bushel*	*Dollars per bushel*	*Dollars per bushel*
Sept. 1972 .	2.57	2.59	2.63	2.69	2.70
October . . .	2.57	2.59	2.63	2.69	2.70
November .	2.57	2.59	2.63	2.69	2.70
December . .	2.57	2.59	2.63	2.69	2.70
Jan. 1973 . .	2.585	2.605	2.645	2.705	2.715
February . .	2.60	2.62	2.66	2.72	2.73
March	2.615	2.635	2.675	2.735	2.745
April	2.63	2.65	2.69	2.75	2.76
May	2.645	2.665	2.705	2.765	2.775
June	2.66	2.68	2.72	2.78	2.79
July	2.66	2.68	2.72	2.78	2.79
August	2.66	2.68	2.72	2.78	2.79

The CCC does not own any significant quantities of old-crop soybeans and probably will not acquire any from the 1971 crop. Market prices are expected to be well above these loan rate formula prices.

SOYBEAN OIL

Domestic Use Off Slightly

Soybean oil supplies for the current marketing year are estimated at 8.6 billion pounds, about 3% below 1970/71.

Domestic use of soybean oil during October-February was 1% below 1970/71. Use of cottonseed oil was off a fifth and lard also fell, but consumption of imported palm oil gained. (See special article on palm oil in this issue.) Slight increases in soybean oil use are likely during the balance of the season. For all of 1971/72 domestic use is estimated at 6.4 billion pounds, a shade above last year.

Soybean oil

Period and year	Production	Domestic use	Exports[1]	Stocks[2]
	Million pounds	*Million pounds*	*Million pounds*	*Million pounds*
Oct.-Jan.				
1969/70	2,646	2,147	352	552
1970/71	2,889	2,167	495	752
1971/72[3] . . .	2,669	2,099	531	800
Feb.-Sept.				
1969/70	5,258	4,181	1,068	543
1970/71	5,376	4,086	1,247	773
1971/72[4] . . .	5,100	4,250	770	850

[1] Excludes shipments to U.S. Territories. [2] End of period. [3] Preliminary. [4] Estimate.

Exports to Drop Sharply

While exports of soybean oil through February were about the same as in 1970/71, they are expected to drop sharply the rest of the marketing year. Export prospects were dampened by severe foreign competition for commercial exports and by the India-Pakistan war last December that affected P.L. 480 food aid. In 1970/71 P.L. 480 shipments to these 2 countries accounted for about one-third of the 1.7 billion pounds exported. Soybean oil exports for all of 1971/72 are now forecast at around 1.3 billion pounds, sharply below 1970/71 but slightly higher than indicated earlier. The revised outlook reflects the prospective shipment of soybean oil to Bangladesh—50,000 tons authorized so far for delivery this year.

As indicated, foreign supplies are substantially higher in 1972. The sharp gains in world oil production reflect mainly: (1) the continued expansion of palm oil in Malaysia; (2) further gain in Philippine copra output; (3) the sharp increase in 1971 West African peanut crops following 2 to 3 years of decline; (4) a modest increase in U.S. soybean production in 1971 and expectations of a large upsurge in Brazil's 1972 crop (based on sharply increased plantings); (5) the increase of more than one-third in Canada's 1971 rapeseed crop and expectations of larger production in India and Western Europe in 1972; (6) the increase for cottonseed in most major producing countries, including a record crop in the Soviet Union; (7) increased sunflowerseed production in Eastern Europe, Spain, Canada, Mexico, and Australia. The Soviet Union's sunflowerseed production is down and the 1972 Argentine crop may also be off.

Soybean Oil Prices Decline; Stock Rise Not Burdensome

Soybean oil prices (crude, Decatur) dropped sharply from 14½ cents per pound last August to 11 cents in January-February. Prices increased to about 12 cents in March and were near year ago levels. Lagging domestic demand, prospects for lower exports, and some increase in stocks have all contributed to the lower price level this season.

Oil stocks (crude and refined) increased to 822 million pounds on March 1. This was well above last fall's low of 726 million but only 4% above a year ago. Stocks probably will increase further this marketing year and by next October 1 may approach 900 million pounds.

While soybean oil stocks as such probably will be greater, the total carryover (including soybeans on an oil equivalent basis) at the end of the soybean marketing year will be down. Last September 1 the soybean oil equivalent carryover was 1.9 billion pounds—composed of 0.8 billion pounds of crude and refined oil plus the 1.1 billion pounds oil equivalent of 99 million bushels of soybeans. Next September 1 when soybean stocks will be even lower than last year, the soybean oil equivalent carryover may be around 1.6 billion pounds—about 15% less than last year.

SOYBEAN MEAL

Soybean meal supplies this marketing year are estimated at 17.3 million tons, about 5% below last year.

Domestic use is estimated to drop slightly below the 1970/71 level of 13.4 million tons. So far this year it is off about 7%. Feeding demand is strong for the reduced supply.

Soybean meal exports this marketing year may decline to around 4 million tons, about 0.5 million below 1970/71. So far this year they are off about 2%. Overseas demand continues strong but U.S. supplies are limited and prices are higher. Most of the decline is expected to occur in the second half of the marketing year as export tonnage to Western Europe slows. Last season Western Europe accounted for three-fourths of the 4.6 million tons the United States shipped.

Reduced soybean meal supplies along with continuing strong demand boosted prices from $73 per ton (44% protein, Decatur) last September to $91 this March. This was $14 per ton above March 1971. More favorable livestock-feed price ratios bolster demand. The total number of high-protein feed consuming animals is expected to be maintained near the 1970/71 level, but the rate of feeding of soybean meal per animal probably will be lower.

COTTONSEED

Crushings Near Year Ago

Prices received by farmers for 1971-crop cottonseed declined from $60 per ton last August to $56 in March. This contraseasonal movement probably reflects delayed marketings and lower grade of the late crop this season, and lower cottonseed oil prices. Through February cottonseed oil mills had received 89% of the 1971 crop. Stocks of seed at oil mills on March 1 were 1.7 million tons, 18% above a year ago.

Crushings so far have totaled 2.4 million tons, the same as a year ago. For the entire season probably around 4 million tons will be crushed, 5 to 10% more than last year. Crushings should produce 1.3 billion pounds of oil and 1.8 million tons of meal.

COTTONSEED OIL

Domestic Use Record Low

Cottonseed oil supplies are near last year's 1.4 billion pounds. Domestic disappearance is estimated at around 750 million pounds, compared with 900 million pounds last year and the smallest of record. Usage so far this year is down one-fifth with all major outlets registering declines, the sharpest in shortening and salad oils. These 2 categories account for around four-fifths of total domestic use. Relatively high prices earlier in the season and increased use of competitive oils fueled the steep decline, although use in recent years has been trending downward.

Exports are running 18% ahead of 1970/71 and for the entire year may exceed 0.4 billion pounds compared with 359 million last season. Most exports are moving for dollars, to Western Europe and Egypt, the major buyers of U.S. cottonseed oil.

Cottonseed oil prices (crude, Valley) this March are about 12 cents per pound, 4 cents below a year ago. Some loosening in the supply situation, lagging domestic demand, and increased availabilities of competitive oils are factors behind lower prices.

Table 6.--Food fats and oils: Supply, disposition, and per capita disappearance, 1962-71

Item	Year beginning October									
	1962	1963	1964	1965	1966	1967	1968	1969	1970 1/	1971 2/
	-- Million pounds --									
Stocks, October 1										
Butter	3/419	3/450	3/188	161	68	212	197	155	171	222
Lard	73	81	68	62	64	107	94	56	60	77
Tallow, edible	21	34	25	22	40	70	39	26	37	63
Corn oil	50	63	62	35	55	47	41	71	60	58
Cottonseed oil	296	488	433	236	202	207	99	377	121	94
Soybean oil	618	920	578	297	462	596	540	415	543	773
Palm oil	16	4/37	4/22	10	17	13	28	28	20	36
Peanut oil	11	30	8	18	34	31	14	17	12	24
Safflower oil	46	80	24	35	50	60	76	61	29	29
Sub-total	1,550	2,183	1,407	876	992	1,343	1,128	1,206	1,054	1,376
Finished products 5/	473	347	232	197	224	256	231	217	236	236
Total food fats and oils	2,023	2,530	1,640	1,073	1,216	1,599	1,359	1,423	1,290	1.612
Imports										
Butter	2	2	1	4	2	2	2	2	2	2
Tallow, edible	6/	1	1	1	1	2	6/	6/	6/	6/
Olive oil	37	66	47	47	55	60	58	63	67	60
Corn oil	15	3	---	10	2	9	8	3	1	---
Cottonseed oil	---	---	---	---	17	13	6/	6/	6/	---
Palm oil	27	8	5	41	89	72	161	122	207	350
Peanut oil	1	---	---	6/	---	6/	6/	6/	6/	---
Sesame oil	1	1	1	2	1	1	2	2	2	2
Total	83	81	55	104	167	159	231	191	279	414
Production										
Butter	1,491	1,454	1,412	1,120	1,235	1,185	1,139	1,127	1,151	1,125
Lard	2,495	2,475	2,205	1,900	2,066	2,067	1,969	1,833	2,051	1,700
Tallow, edible	475	572	528	551	597	540	520	566	550	500
Oleo oil & stearine 7/	4	6	7	12	14	6	6	11	4	5
Corn oil	379	413	435	449	446	442	467	474	485	485
Cottonseed oil	1,927	1,936	1,999	1,830	1,223	1,020	1,450	1,251	1,235	1,300
Soybean oil	5,091	4,822	5,146	5,800	6,076	6,032	6,531	7,904	8,265	7,775
Peanut oil	91	114	144	163	175	198	199	180	266	300
Safflower oil (estimate)	152	104	111	138	170	139	100	100	120	140
Sub-total	12,106	11,896	11,987	11,963	12,001	11,629	12,381	13,446	14,126	13,330
Oilseeds (oil equivalent of exports)	1,989	2,115	2,361	2,940	3,050	3,078	3,210	5,007	4,850	4,780
Total Supply	16,201	16,622	16,043	16,080	16,435	16,465	17,181	20,067	20,545	20,135
Exports and Shipments										
Butter	8/131	8/319	150	24	7	31	37	8	27	150
Lard	571	706	431	218	247	246	282	405	382	200
Tallow, edible	5	4	5	3	5	6	8	11	6	5
Oleo oil & stearine	4	6	7	12	14	6	6	11	4	5
Corn oil	---	---	---	---	18	25	29	34	43	50
Cottonseed oil	8/389	8/584	641	275	78	51	141	453	373	450
Soybean oil	8/1,165	8/1,106	1,357	948	1,105	993	899	1,449	1,782	1,350
Peanut oil	4	67	75	14	6	4	28	34	60	100
Processed food oils 9/	94	111	79	64	76	59	61	63	67	65
Sub-total	2,362	2,903	2,744	1,558	1,557	1,427	1,490	*2,493	*2,744	*2,415
Oilseeds (oil equivalent)										
Cottonseed	3	3	3	3	2	1	1	9	12	5
Soybeans	1,984	2,103	2,265	2,764	2,930	2,972	3,148	4,941	4,757	4,600
Peanuts (for crushing abroad)	2	9	29	43	47	28	9	12	58	100
Safflower	---	---	64	130	71	77	52	45	23	75
Sub-total	1,989	2,115	2,361	2,940	3,050	3,078	3,210	5,007	4,850	4,780
Total exports	4,351	5,018	5,104	4,498	4,608	4,505	4,700	7,500	7,613	7,195
Domestic disappearance										
Butter	1,332	1,399	1,291	1,193	1,088	1,172	1,146	1,106	1,075	1,050
Lard	1,904	1,786	1,780	1,676	1,781	1,834	1,726	1,425	1,652	1,500
Tallow, edible	457	578	527	530	563	567	526	544	518	525
Corn oil	381	416	462	439	438	432	416	454	445	430
Cottonseed oil	1,347	1,407	1,555	1,590	1,157	1,090	1,031	1,052	890	750
Soybean oil	3,624	4,058	4,069	4,687	4,837	5,096	5,756	6,328	6,253	6,350
Olive oil	37	66	47	47	55	60	58	63	67	60
Palm oil	43	23	17	34	93	57	161	130	191	325
Peanut oil	69	69	59	133	172	211	168	151	193	200
Safflower oil (estimate)	119	160	100	123	159	124	115	107	100	100
Sesame oil	1	1	1	2	1	1	2	2	2	2
Processed food oils 9/	-94	-111	-79	-64	-76	-59	-61	-63	-67	-65
Total	9,220	9,852	9,829	10,390	10,268	10,585	11,044	11,298	11,319	11,227
Total (calculated net) 10/	9,346	9,967	9,864	10,363	10,236	10,610	11,058	11,277	11,319	
Total use for food 11/	8,845	9,605	9,298	10,044	10,030	10,316	10,590	10,988	11,066	10,975
	-- Pounds --									
Per capita disappearance										
Butter (fat content)	5.7	5.9	5.4	4.9	4.4	4.7	4.6	4.4	4.2	4.0
Margarine (fat content)	7.8	7.6	7.9	8.3	8.6	8.5	8.5	8.7	8.7	8.7
Lard (direct use)	6.5	6.4	6.2	5.7	5.4	5.4	5.2	4.5	4.6	4.2
Baking and frying fats	13.6	14.0	13.7	16.0	15.7	16.1	16.7	17.6	17.0	16.8
Salad and cooking oils	10.6	12.0	12.3	13.0	12.8	13.2	14.0	15.0	15.6	15.6
Other edible uses	1.3	2.9	1.4	2.2	2.5	2.4	2.3	2.6	2.3	2.3
Total (fat content)	45.5	48.8	46.7	50.1	49.5	50.4	51.3	52.8	52.5	51.6

1/ Preliminary. 2/ Forecast except October 1 stocks. 3/ Includes estimates of butter oil, ghee, and canned butter. 4/ Includes stocks held by GSA. 5/ Shortening, margarine (fat content), and salad and cooking oils. 6/ Less than 500,000 pounds. 7/ Represents exports only; production data are not available. 8/ Includes estimates of foreign donations of fats and oils, not reported by Census. 9/ Includes exports of processed food oils not classified by kind, shortening and other secondary fats. 10/ Adjusted to reflect changes in stocks of finished products. 11/ Excludes food fats and oils used for non-food purposes, but includes non-food oils (coconut and palm kernel) used in food. *Includes safflower oil not shown separately above.

Cottonseed oil

Period	Production	
	1970/71	1971/72
	Million pounds	*Million pounds*
August-January	650	647
February-July	561	653
Total	1,211	[1]1,300
	Domestic use	
August-January	521	416
February-July	377	334
Total	898	[1]750
	Exports[2]	
August-January	139	161
February-July	220	239
Total	359	[1]400

[1] Estimate. [2] Includes shipments to U.S. Territories.

LARD

Production Off Sharply

Lard production is expected to total around 1.7 billion pounds this marketing year—a drop of over 15% from 1970/71—reflecting reduced hog slaughter and a sharp downturn in lard yield per hog. Slaughter during October-February was 6% below a year ago but lard output was off about 19%. Lard yield per hog for the 5 months averaged 18½ pounds compared with 21½ pounds in 1970/71. Continued declines are expected through the balance of the marketing year.

With smaller lard supplies, domestic use likely will drop from 1.6 billion pounds last year to around 1.5 billion. So far this year it is down a tenth.

Lard exports also will be sharply lower this year—possibly around 200 million pounds compared with 382 million last season. So far, they are down 40%. The actual volume will depend upon shipments to the United Kingdom under the USDA export payment program. About 62 million pounds have been accepted under the program this marketing year, well below the 180 million at this time a year ago. The U.S. export payment rate continues at 1 cent per pound. The EEC has increased its export payment rate from 1.9 to 2.1 cents per pound in early February.

Lard prices (tanks, loose, Chicago) this season are averaging around 10 cents per pound, about 1 cent below a year ago, reflecting reduced domestic and export demand.

PEANUTS

Edible Use Up Slightly

The record peanut supply of nearly 3.5 billion pounds (farmers' stock basis) is around 3% above last season. Output is well in excess of edible requirements. CCC has acquired about a third of the 1971 crop of 3 billion pounds under the support program. The season average price received by farmers was 13.6 cents per pound, near support and about 1 cent above 1970/71.

After a pause last year, edible use this season is increasing. So far it is up nearly 3%, or near the long-term average rate of increase. Edible consumption for the entire season may total about 1.6 billion pounds or 8 pounds per person. Peanut butter, peanut candy, and salted peanuts are the major outlets for edible grade peanuts. (For a comprehensive analysis, see "U.S. Peanut Production and Marketing Trends", FOS-261, February 1972.)

Crushings this season are expected to be record high, exceeding 900 million pounds (farmers' stock basis) compared with 800 million in 1970/71. In recent years crushings have increased, mainly reflecting heavier CCC diversions of peanuts acquired under the price support program. Peanut exports are running well ahead of last year and probably will total around 350 million pounds.

FLAXSEED

Crushings Up; Stocks May Decline

Flaxseed supplies for the year ending June 30 total 45 million bushels, slightly below 1970/71. Production was 19 million bushels compared with 30 million in 1970. The season average price received by farmers is $2.33 per bushel, below the 1971 support price of $2.50.

Crushings for the year may reach 22 million bushels, compared with 19 million in 1970/71. During July-February, they totaled 13.4 million bushels, about 2 million more than a year ago. The larger crush is resulting from the CCC toll crush program, whereby the Corporation exchanges 1 bushel of flaxseed for 20 pounds of linseed oil on a competitive bid basis. The crusher retains the meal. So far this season, about 9 million bushels have been sold at an average price of about 90 cents per bushel. In return, crushers will deliver 175 million pounds of linseed oil to CCC, although some of this delivery may be delayed into the next crop year.

No flaxseed has been inspected for export so far this season. Some will be shipped later this spring after the Great Lakes open. CCC has sold some recently for export in April.

Based on the above demand estimates, stocks of flaxseed on June 30 may be around 20 million bushels, about 6 million below 1971. The greater part of this will be in CCC hands. As of March 1 there were 7 million bushels of flaxseed under loan, compared with 12 million a year ago. With prices averaging below support, CCC is expected to acquire most of this volume.

On February 18, USDA announced that the support price for 1972-crop flaxseed would remain the same as the $2.50 per bushel of the previous 2 years.

LINSEED OIL

Stock Buildup Continues

Linseed oil production for the year ending June 30 is estimated at around 450 million pounds, nearly a fifth above 1970/71. Output during July-February totaled 273 million pounds compared with 232 million a year ago.

So far this season, domestic use is up a little and for the entire year may total a tenth above the 250-million-pound level of recent years. During July-February factory consumption totaled 139 million pounds, compared with 124 million for this period a year ago.

Linseed oil exports for the year ending June 30 may exceed the 53 million pounds shipped in 1970/71. Through February they totaled 25 million pounds. However, exports are expected to pick up in coming months under the reestablished linseed oil export sales program, which became operative in early 1972. As of late March, about 80 million pounds of CCC-owned oil had been sold under the program for export at an average price of around 7½ cents per pound (basis Gulf ports). Not all of this volume is expected to be exported during the current marketing year.

The slight increases in domestic use and exports will only partly offset the increased supply, and carryover next July 1 is expected to rise substantially, to nearly 300 million pounds. A large part of this will be in CCC hands. Stocks on March 1 were 245 million pounds, the most since December 1, 1954.

Linseed oil prices (raw, tanks, Minneapolis) have been steady at a little under 9 cents per pound this marketing year, about 1 cent below 1970/71. They are expected to continue low in view of the burdensome stocks and limited prospects for use.

U.S. FOREIGN TRADE

U.S. exports of fats and oils (including oil equivalent of oilseeds) increased 5% in calendar 1971 to a record 10.9 billion pounds (table 7). Imports also set a new record at 1.5 billion, about 6% above the previous year. This gave the United States a favorable net trade balance of 9.4 billion pounds, up from the record 8.9 billion of the previous year.

The increase in exports mainly reflected larger shipments of tallow, soybean oil, butter, fish oils, and peanut oil. More palm oil and coconut oil contributed to the gain in imports. The United States has continuously exported more fats and oils than we have imported since 1949.

U.S. exports of oilseed meal (including meal equivalent of oilseeds) in 1971 were a record 14.7 million tons, 2% above 1970. About two-thirds of the total was in the form of soybeans and one-third was soybean meal, destined mostly for Western Europe.

U.S. CONSUMPTION OF FOOD FATS

Per Capita Use Slips

In calendar 1971, U.S. civilians used 10.7 billion pounds of food fats and oils (including the fat content of butter and margarine), as measured by domestic disappearance (table 8). This was about 1% below 1970. On a per capita basis, this translates to about 52 pounds, around 1 pound below the record 53 pounds in 1970. Decreases in butter, lard, shortening, and "other edible" uses more than offset slight gains in margarine and salad and cooking oils.

Table 7.--Imports and exports of fats, oils, oil-bearing materials, fat-and-oil products (in terms of oil) and oilmeals, averages 1956-60 and 1961-65 and calendar years 1969-71

Item	Imports for consumption					Exports 1/				
	Average					Average				
	1956-60	1961-65	1969	1970	1971	1956-60	1961-65	1969	1970	1971
	Million pounds									
Food fats and oils										
Butter	2.6	2.3	2.2	2.2	2.1	55.0	71.8	27.1	9.4	100.0
Lard	---	2/	2/	---	.5	608.7	528.1	329.2	418.7	344.6
Beef fats	.9	.6	.5	.1	.1	21.3	10.3	13.7	22.3	10.5
Total, edible animal fats	3.5	2.9	2.7	2.3	2.7	685.0	610.2	370.0	450.4	455.1
Corn oil	7.0	11.8	5.2	3.1	.6	---	---	31.8	36.3	42.2
Cottonseed oil	---	2/	---	.1	2/	432.4	453.4	262.4	375.3	402.0
Cottonseed (17 percent)	---	---	---	---	---	2.9	2.5	2.5	8.3	12.3
Olive oil, edible	50.3	52.1	57.7	62.4	61.7	---	---	---	---	---
Palm oil	33.6	25.6	159.6	140.9	226.9	---	---	---	---	---
Peanut oil	2.4	1.1	2/	2/	2/	10.8	31.8	33.9	32.1	85.2
Peanuts, shelled (43.5 percent)	---	---	---	---	---	10.1	13.6	7.3	14.0	53.7
Soybean oil	---	---	2/	---	2/	836.8	1,080.2	921.9	1,535.1	1,765.8
Soybeans (18.3 percent)	2/	2/	2/	2/	2/	1,125.5	1,994.6	3,425.0	4,831.8	4,656.5
Safflower seed (36 percent)	---	---	---	---	---	---	26.7	49.1	46.9	40.2
Other vegetable oils	7.9	12.5	19.8	21.6	23.5	20.7	31.2	7.6	8.1	12.2
Total, edible vegetable oils	101.2	103.1	242.3	228.1	312.7	2,439.2	3,634.0	4,741.5	6,887.9	7,070.1
Soap fats and oils										
Tallow, inedible	1.1	1.3	5.8	7.4	4.9	1,309.8	1,752.2	1,774.3	2,028.9	2,442.5
Greases	.3	.5	2/	2/	2/	120.5	207.8	121.9	213.4	166.2
Fish and fish liver oils non-medicinal	1.2	3.5	.4	.3	1.7	128.4	155.0	199.6	168.0	236.1
Marine mammal oils	43.2	65.5	46.0	55.6	45.6	1.7	4.7	---	---	---
Olive oil, inedible	.5	.5	.3	.4	.2	6.5	---	---	---	---
Total, slow-lathering oils	46.3	71.3	52.5	63.7	52.4	1,566.9	2,119.7	2,095.8	2,410.3	2,844.8
Babassu oil	---	1.9	5.7	6.3	---	---	---	---	---	---
Coconut oil	190.2	318.9	428.6	594.7	628.6	8.4	5.8	8.7	11.6	21.6
Copra (64 percent)	429.9	405.1	384.1	278.8	268.6	.1	2/	---	---	---
Palm kernel oil	60.2	84.0	99.4	82.5	95.8	---	---	---	---	---
Total, lauric-acid oils	680.3	809.9	917.8	962.3	993.0	8.5	5.8	8.7	11.6	21.6
Drying oils										
Flaxseed (36.1 percent)	2/	2/	2/	2/	1.5	143.4	91.0	165.2	59.2	8.5
Linseed oil	2/	2/	2/	2/	2/	62.6	20.9	38.7	48.6	46.9
Oiticica oil	10.0	9.2	11.7	3.8	2.7	---	---	---	---	---
Tall oil	---	---	---	---	---	41.3	39.9	124.7	163.1	131.8
Tung oil	27.1	24.0	22.5	18.2	22.2	9.8	7.4	1.9	2.1	2.0
Total	37.1	33.2	34.2	22.0	26.4	257.1	159.2	330.5	273.0	189.2
Other industrial oils and fats										
Castor oil	103.5	109.5	142.1	106.5	76.5	2.2	.8	---	---	---
Fish-liver oils, medicinal	19.6	13.8	9.4	9.5	13.0	.7	.6	---	---	---
Rapeseed oil	3.4	4.4	9.4	7.2	11.1	---	---	---	---	---
Wool grease	6.4	5.7	5.3	8.3	9.7	---	---	---	---	---
Other vegetable oils and fats, inedible	.1	5.5	11.8	11.4	9.6	16.5	32.9	74.3	109.3	120.0
Total	133.0	138.9	178.0	142.9	119.9	19.4	34.3	74.3	109.3	120.0
Products										
Margarine (fat content)	---	---	---	---	---	7.6	7.1	9.7	10.1	10.8
Shortening	---	---	---	---	---	25.9	25.4	32.3	37.2	30.6
Salad products (fat content)	---	---	---	---	---	3.2	4.4	10.8	12.5	13.6
Soap (fat content)	1.1	1.9	2.6	2.4	2.5	22.1	20.2	25.7	22.8	20.5
Fatty acids	1.2	6.8	15.6	8.0	6.1	34.0	56.3	83.0	123.8	123.1
Total	2.3	8.7	18.2	10.4	8.6	92.8	113.4	161.5	206.4	198.6
Grand total	1,003.7	1,168.0	1,445.8	1,431.9	1,515.7	5,068.9	6,676.6	7,782.4	10,348.7	10,899.1
Glycerine	18.0	7.8	1.4	.2	.8	16.0	28.0	53.0	74.0	69.0
Oilseed Cake and Meal:	Thousand tons									
Soybean	.3	---	---	---	---	469.1	1,447.0	3,352.9	4,103.5	4,573.1
Cottonseed	69.6	42.3	20.7	3/	---	54.8	76.3	24.7	33.8	36.5
Linseed	3.3	1.4	1.9	1.7	2.0	50.6	53.7	93.2	74.9	110.7
Copra	41.1	8.4	---	---	---	---	---	---	---	---
Corn	---	---	---	---	---	---	.6	5.7	6.3	6.3
Other	.9	8.7	3.6	6.9	3.2	6.1	10.7	50.3	61.3	82.9
Total oilmeals	115.2	60.8	26.2	8.6	5.2	580.6	1,588.3	3,526.8	4,279.8	4,809.5

1/ Includes re-exports and foreign donations and shipments to U.S. Territories.
2/ Less than 50,000 pounds.
3/ Less than 50 tons.
SOURCE: Bureau of Census.

Table 8.--Fats and oils: Use in products for civilian consumption, 1935-39 average, annual 1947-71

Year	Food products													
	Butter (actual weight)		Lard (direct use) 1/		Margarine (actual weight)		Baking and frying fats (shortening)		Salad and cooking oils 2/		Other edible uses 3/		All food products 4/	
	Total	Per capita	Total	Per capita	Total	Per capita	Total	Per capita	Total	Per capita	Total	Per capita	Total	Per capita
	Mil. lb.	Lb.	Mil. lb.	Lb.	Mil. lb.	Lb.	Mil. lb.	Lb.	Mil. lb.	Lb.	Mil. lb.	Lb.	Mil. lb.	Lb.
Average 1935-39	2,196	17.0	1,424	11.0	371	2.9	1,519	11.8	---		844	6.5	5,857	45.4
1947	1,600	11.2	1,792	12.6	713	5.0	1,338	9.4	---		988	6.9	5,986	42.0
1948	1,450	10.0	1,850	12.7	887	6.1	1,410	9.7	---		1,037	7.1	6,183	42.6
1949	1,549	10.5	1,744	11.8	851	5.8	1,435	9.7	---		1,163	7.9	6,287	42.6
1950	1,614	10.7	1,891	12.6	918	6.1	1,656	11.0	---		1,297	8.6	6,890	45.9
1951	1,445	9.6	1,855	12.3	996	6.6	1,365	9.0	---		1,168	7.7	6,366	42.1
1952	1,316	8.6	1,817	11.8	1,219	7.9	1,562	10.2	---		1,339	8.7	6,765	44.1
1953	1,329	8.5	1,772	11.4	1,256	8.1	1,597	10.2	---		1,415	9.1	6,876	44.1
1954	1,410	8.9	1,627	10.2	1,346	8.5	1,870	11.8	---		1,514	9.5	7,238	45.5
1955	1,460	9.0	1,639	10.1	1,323	8.2	1,863	11.5	---		1,704	10.5	7,447	45.9
1956	1,439	8.7	1,623	9.8	1,354	8.2	1,797	10.9	---		1,800	10.9	7,475	45.2
1957	1,406	8.4	1,589	9.4	1,446	8.6	1,756	10.4	---		1,824	10.8	7,469	44.4
1958	1,418	8.3	1,640	9.6	1,549	9.0	1,935	11.3	---		1,804	10.5	7,770	45.3
1959	1,371	7.9	1,536	8.8	1,604	9.2	2,196	12.6	1,486	8.5	459	2.6	8,068	46.2
1960	1,332	7.5	1,358	7.6	1,676	9.4	2,238	12.6	1,630	9.2	414	2.3	8,064	45.3
1961	1,335	7.4	1,393	7.7	1,708	9.4	2,311	12.8	1,661	9.2	361	2.0	8,173	45.1
1962	1,342	7.3	1,314	7.2	1,709	9.3	2,469	13.4	2,021	11.0	134	.7	8,399	45.7
1963	1,281	6.9	1,190	6.4	1,785	9.6	2,525	13.5	2,066	11.1	384	2.1	8,639	46.3
1964	1,297	6.9	1,193	6 3	1,835	9.7	2,598	13.7	2,249	11.9	428	2.3	8,994	47.6
1965	1,232	6.4	1,225	6.4	1,891	9.9	2,695	14.1	2,398	12.6	313	1.6	9,147	47.7
1966	1,099	5.7	1,071	5.5	2,038	10.5	3,079	15.9	2,463	12.9	465	2.4	9,614	49.6
1967	1,076	5.5	1,055	5.4	2,046	10.5	3,108	15.9	2,474	12.6	482	2.5	9,634	49.2
1968	1,117	5.7	1,106	5.6	2,130	10.8	3,211	16.3	2,665	13.5	488	2.5	10,082	51.0
1969	1,081	5.4	1,011	5.1	2,154	10.8	3,398	17.1	2,863	14.4	473	2.4	10,339	51.8
1970	1,061	5.3	939	4.7	2,223	11.0	3,496	17.3	3,125	15.5	541	2.7	10,741	53.3
1971 5/	1,034	5.1	887	4.3	2,264	11.1	3,429	16.8	3,215	15.7	480	2.3	10,653	52.2

Year	Industrial products												All products	
	Soap		Drying oil products 6/		Fatty acids		Animal feeds		Other industrial products		All industrial products		Including only fat content of butter and margarine	Per capita (fat content)
	Total	Per capita	Total	Per capita	Total	Per capita	Total	Per capita	Total	Per capita	Total	Per capita		
	Mil. lb.	Lb.	Mil. lb.	Lb.	Mil. lb.	Lb.	Mil. lb.	Lb.	Mil. lb.	Lb.	Mil. lb.	Lb.	Mil. lb.	Lb.
Average 1935-39	1,638	12.8	774	6.0	---	---	---	---	440	3.4	2,852	22.2	8,709	67.5
1947	2,234	15.7	1,007	7.1	280	1.9	---	---	605	4.2	4,126	28.9	10,113	70.9
1948	2,039	14.0	1,071	7.4	276	1.9	---	---	560	3.9	3,946	27.2	10,129	69.8
1949	1,758	11.9	964	6.5	413	2.8	---	---	441	3.0	3,576	24.2	9,863	66.8
1950	1,804	12.0	1,182	7.9	501	3.4	---	---	653	4.3	4,140	27.6	11,030	73.4
1951	1,505	10.0	1,129	7.5	453	3.0	---	---	763	5.0	3,850	25.5	10,216	67.6
1952	1,352	8.8	1,010	6.6	412	2.7	---	---	819	5.3	3,593	23.4	10,358	67.5
1953	1,291	8.3	1,064	6.8	577	3.7	---	---	699	4.5	3,631	23.3	10,507	67.4
1954	1,177	7.4	1,001	6.3	521	3.3	111	.7	717	4.5	3,527	22.2	10,765	67.7
1955	1,115	6.9	1,104	6.8	606	3.8	181	1.1	834	5.1	3,840	23.7	11,287	69.5
1956	1,038	6.3	1,089	6.6	645	3.9	296	1.8	894	5.4	3,962	24.0	11,437	69.2
1957	994	5.9	1,015	6.0	737	4.4	425	2.5	783	4.7	3,959	23.5	11,428	67.9
1958	914	5.3	920	5.4	722	4.2	550	3.2	883	5.2	3,989	23.3	11,759	68.6
1959	862	4.9	910	5.2	1,150	6.6	505	2.9	808	4.7	4,235	24.3	12,303	70.5
1960	860	4.8	821	4.6	1,245	7.0	504	2.8	841	4.7	4,271	24.0	12,335	69.3
1961	830	4.6	846	4.7	1,226	6.8	502	2.8	819	4.5	4,223	23.3	12,396	68.4
1962	774	4.2	879	4.8	1,319	7.2	876	4.8	878	4.8	4,726	25.7	13,125	71.5
1963	775	4.2	866	4.6	1,408	7.6	827	4.5	920	4.9	4,796	25.7	13,435	72.1
1964	773	4.1	889	4.7	1,598	8.5	838	4.5	885	4.7	4,983	26.4	13,977	73.9
1965	706	3.7	895	4.7	1,735	9.1	717	3.8	763	4.0	4,816	25.1	13,963	72.9
1966	719	3.7	908	4.7	1,957	10.1	893	4.6	852	4.4	5,329	27.6	14,988	77.5
1967	706	3.6	844	4.3	1,893	9.7	972	5.0	819	4.2	5,234	26.8	14,868	76.2
1968	689	3.5	850	4.3	1,907	9.7	1,011	5.1	788	4.0	5,245	26.6	15,327	77.8
1969	673	3.4	728	3.7	1,943	9.8	1,078	5.4	988	5.0	5,425	27.2	15,764	79.1
1970	679	3.4	620	3.1	2,004	9.9	1,098	5.4	872	4.3	5,272	26.2	16,014	79.4
1971 5/	677	3.3	619	3.0	1,779	8.8	1,143	5.7	1,022	5.1	5,240	25.7	15,893	77.8

1/ Excludes lard used in margarine, shortening, and nonfood products. 2/ Fully processed liquid vegetable oils. Including use in mayonnaise and salad dressings, potato products, bakery products, and in fish canning, etc. Not reported separately prior to 1959. 3/ Mainly salad and cooking oils prior to 1959. Beginning with 1959 includes all food fats and oils used other than butter, lard, margarine, shortening or cooking and salad oils. 4/ Including only the fat content of butter and margarine estimated at 80-81% of total weight. 5/ Preliminary. 6/ Paints, varnishes, floor coverings, oil cloth, printing inks, core oils, synthetic resins, insulation, linings, packings, coated fabrics (other than oil cloth), caulking and other protective coatings.

PALM OIL, A FAST-RISING COMPETITOR OF U.S. FATS AND OILS

by

George W. Kromer

ABSTRACT: U.S. supplies of imported palm oil have quadrupled over the past 5 years, to about 400 million pounds estimated for 1972, or some 4% of the domestic edible oil use. It enters the United States duty free, mainly from Malaysia and Indonesia. It is imported at prices below domestic edible vegetable oils and has been substituted in some market outlets, particularly shortening manufacture. Competition likely will intensify since world output of palm oil is increasing and probably will double by 1980. The sharpest gains are projected for Malaysia, which may produce 4 times as much in 1980, mainly for export.

KEY WORDS: U.S. palm oil imports and use; world oil palms production and exports.

U.S. imports and consumption of palm oil are increasing rapidly and probably will continue to do so in the foreseeable future. While imported supplies are still relatively small in the overall U.S. fats and oils economy, greater consumption of palm oil is currently at the expense of domestic edible oils. And a prospective tripling of world export availabilities by 1980 points to increasingly keen competition for U.S. cottonseed and soybean oils in the domestic and foreign markets.

Major world producers and exporters of palm oil and palm kernel oil are Malaysia, Nigeria, Indonesia, and Zaire (formerly Republic of the Congo)[1]. The sharp uptrend in output of oil palm products mainly reflects new plantings of improved high-yielding varieties. Other countries getting into production include Ivory Coast and Dahomey.

There is no commercial production of palm oil or palm kernel oil in the United States.

U.S. Imports to Rise Sharply in 1972

U.S. supplies of imported palm oil have risen from about 100 million pounds in calendar 1967 to a record 400 million pounds estimated for 1972 (table 9).

Imports through February this year totaled 80 million pounds compared with 36 million in the first 2 months of 1971. Imports for all of 1972 are estimated around 350 million pounds, more than 50% above 1971. U.S. stocks of palm oil on January 1 have averaged around 40 million pounds in recent years. On March 1, 1972, they were 71 million compared with 49 million a year ago (table 11).

Last year palm oil imports totaled 227 million pounds. Indonesia shipped us 123 million pounds or 54% of the 1971 total and Malaysia shipped 100 million pounds or 44% (table 12). These countries accounted for 93% of our imports during 1967-71. The Republic of the Congo was our major supplier in earlier years.

U.S. imports of palm oil were relatively low during 1960-65 when the GSA (General Service Administration) was selling the Government stockpile of 37.5 million pounds. All of this oil went into inedible uses. After GSA liquidation, imports jumped from a mere 7 million pounds in 1965 to 76 million in 1966 and have continued upward. Edible uses have accounted for the largest part of this increase, facilitated by the improved quality of palm oil coming from the producing countries.

The average unit value of U.S. imports of palm oil (f.o.b. producing countries), as reported by the Bureau of the Census, dropped from 11 cents per pound in 1965 to 6½ cents in 1969, then increased to 10 cents in 1970 and 1971. Even after adjusting for ocean transportation, these price levels were below those of domestically produced edible vegetable oils.

Domestic Use Expanding; Shortening Biggest Outlet

Palm oil is now used primarily as an edible oil, competing mainly with cottonseed and soybean oils. Total U.S. disappearance of palm oil has increased from just under 100 million pounds in 1967 to an estimated 325 million this year. A continued uptrend in domestic use is expected as supplies of palm oil become more plentiful and prices remain competitive.

Edible use now accounts for about two-thirds of total U.S. consumption of palm oil, nearly all in shortening manufacture (table 10). Use in this product rose from 61

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[1] Both oils come from the oil palm. Palm oil is extracted from the outer fleshy pulp of the palm fruit, and palm kernel oil comes from the hard inner kernel of the nut. The oil palm is distinctive among commercial oil-bearing plants in producing 2 oils of entirely different chemical composition and appearance from the same plant. The fruit produces a red oil, which contains carotenoids, whereas the crushed kernel produces a white oil similar to coconut oil.

Table 9.--Palm oil: U.S. supply, disposition and price, 1950-72

Calendar year	Supply					Disposition	Price per pound		
	Imports 1/	Stocks, January 1			Total	Domestic disappearance	Clarified, drums, truckload, New York	Tank-wagons, New York	Malaya, 5% bulk, c.i.f., European ports
		Total	GSA	Trade					
	-- Million pounds --						Cents	Cents	Cents
1950	56	2/43	---	---	99	3/73	14.6	---	---
1951	101	2/23	---	---	124	3/97	23.1	---	---
1952	51	2/26	---	---	77	3/59	13.8	---	---
1953	36	2/17	---	---	53	3/39	12.2	---	---
1954	66	2/15	---	---	81	4/67	12.5	---	---
1955	44	20	---	---	64	59	13.0	---	---
1956	28	19	---	---	47	46	15.0	---	---
1957	19	21	---	---	40	42	15.2	---	---
1958	43	16	---	16	59	47	14.4	---	---
1959	31	12	---	12	43	4/42	14.6	12.3	---
1960	47	48	38	10	95	4/53	14.2	11.6	---
1961	56	61	35	26	117	4/66	14.6	11.8	---
1962	36	57	34	23	93	4/60	13.9	11.6	---
1963	24	35	28	7	59	4/44	14.0	11.6	---
1964	6	37	20	17	43	4/38	14.2	11.8	---
1965	7	19	10	9	26	4/30	15.8	13.4	12.4
1966	76	9	---	9	85	4/66	15.1	12.7	10.7
1967	64	33	---	33	97	4/86	14.8	12.6	10.2
1968	103	16	---	16	119	4/97	14.5	12.0	7.7
1969	160	28	---	28	188	153	12.5	11.2	8.1
1970 5/	141	35	---	35	176	133	15.9	13.2	11.6
1971 5/	227	43	---	43	270	230	15.1	13.3	11.7
1972 6/	350	40	---	40	390	325	7/14.8	7/11.8	7/ 8.7

1/ As palm oil enters the United States duty free, all imports are reported as imports for consumption. 2/ Excludes stocks held by the U.S. Government for stockpiling of strategic materials. 3/ Allows for movement into or out of Government stockpiles. 4/ Reported factory consumption figures used for years in which it exceeds calculated domestic disappearance. 5/ Preliminary. 6/ Forecast, except January 1 stocks. 7/ January-March average.

Table 10.--Palm oil: U.S. utilization, by products, 1950-71 1/

Calendar year	Food				Nonfood				Total domestic disappearance
	Shortening	Margarine	Other	Total	Soap	Fatty acids	Other	Total	
	-- Million pounds --								
1950	---	---	---	---	5	---	39	44	2/73
1951	---	---	---	---	3	---	37	40	2/97
1952	---	---	1	1	3	---	56	59	2/59
1953	---	---	1	1	4	---	35	39	2/39
1954	16	---	---	16	8	---	39	51	67
1955	---	---	---	---	12	---	47	59	59
1956	---	---	---	---	4	---	43	46	46
1957	---	---	---	---	2	---	40	42	42
1958	---	---	---	---	1	---	46	47	47
1959	---	---	3	3	5	D	33	38	42
1960	---	---	1	1	10	D	41	52	53
1961	21	5	4	30	---	D	37	37	66
1962	16	4	9	29	1	D	30	31	60
1963	14	1	2	17	3	D	24	27	44
1964	11	---	---	11	---	D	27	27	38
1965	13	---	---	13	---	D	17	17	30
1966	38	---	14	52	---	D	14	14	66
1967	61	---	1	62	---	D	24	24	86
1968	72	---	4	76	---	D	20	20	97
1969	110	---	18	128	---	D	25	25	153
1970 3/	85	1	14	100	---	D	34	34	133
1971 3/	140	1	18	159	---	D	71	71	230

1/ Mostly ERS estimates, as Census end-use data are limited in order to avoid disclosing figures for individual companies. 2/ Includes Government stockpiling activities. 3/ Preliminary. D.--Census disclosure.

Table 11.--Palm oil: U.S. supply, domestic use, and value of imports, 1969-72

Year and Item	Unit	January	February	March	April	May	June	July	August	September	October	November	December	Total or average
1969														
Beginning stocks	Mil. lb.	28	38	32	32	40	26	18	33	35	28	40	36	
Imports	Mil. lb.	13	16	7	18	7	---	33	18	6	22	9	11	160
Domestic use	Mil. lb.	4	21	7	10	21	8	18	16	13	10	13	12	153
Value of imports per pound	Cents	5.7	5.2	6.7	5.9	6.0	---	6.8	7.4	6.7	7.1	6.7	7.4	6.6
1970														
Beginning stocks	Mil. lb.	35	29	29	24	23	18	31	36	27	20	29	37	
Imports	Mil. lb.	8	12	3	8	1/	22	13	7	6	24	4	33	141
Domestic use	Mil. lb.	13	12	9	9	5	9	8	17	13	15	---	27	133
Value of imports per pound	Cents	6.1	7.9	9.2	9.4	---	11.2	11.3	12.0	11.8	10.8	10.9	10.3	10.3
1971 2/														
Beginning stocks	Mil. lb.	43	40	49	58	69	72	62	51	47	36	52	55	
Imports	Mil. lb.	11	25	24	25	15	13	6	12	15	26	38	18	227
Domestic use	Mil. lb.	14	15	16	14	12	24	16	17	26	10	35	32	230
Value of imports per pound	Cents	10.3	10.3	10.5	10.9	11.7	11.5	10.5	9.7	10.3	11.1	11.1	---	10.3
1972 2/														
Beginning stocks	Mil. lb.	40	59	71										
Imports	Mil. lb.	42	38											
Domestic use	Mil. lb.	23	25											
Value of imports per pound	Cents	10.8	11.4											

1/ Less than 500,000 pounds. 2/ Preliminary. Imports, value of imports, and stocks are from Bureau of Census.

Table 12.--Palm oil: U.S. imports by country of origin and value, 1960-71

Country of origin	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971 1/
	-- Million pounds --											
North America:												
Canada	---	2/	---	2/	---	.2	2/	---	---	.1	---	---
Costa Rica	1.1	2.4	---	---	---	---	---	---	---	---	---	---
Total	1.1	2.4	---	2/	---	.2	2/	---	---	.1	---	---
South America:												
Brazil	---	---	---	---	---	---	---	---	---	.8	---	---
Europe:												
Belgium	.6	2/	.3	.3	.1	---	.2	---	.4	.1	---	---
Netherlands	---	---	.1	---	---	---	---	2.2	.4	---	1.1	---
Other	---	---	---	---	---	---	---	---	---	---	.3	.1
Total	.6	2/	.4	.3	.1	---	.2	2.2	.8	.1	1.4	.1
Africa:												
Nigeria	.7	---	4.2	5.3	---	---	6.2	2.6	---	---	---	1.7
Republic of Congo	40.2	23.5	14.8	12.2	4.7	2.3	3.0	1.5	2.2	2.0	11.6	.7
Other	---	---	---	---	---	---	---	---	---	---	1.1	2/
Total	40.9	23.5	19.0	17.5	4.7	2.3	9.2	4.1	2.2	2.0	12.7	2.4
Asia:												
Indonesia	4.2	30.0	16.1	5.7	1.5	4.0	47.1	40.8	43.4	83.5	78.6	123.0
Malaysia	---	---	---	---	---	---	19.4	17.1	56.9	69.4	45.9	100.3
Other	---	---	---	---	---	---	---	---	---	3.7	2.2	1.1
Total	4.2	30.0	16.1	5.7	1.5	4.0	66.5	57.9	100.3	156.6	126.8	224.4
Grand total	46.8	56.0	35.5	23.5	6.3	6.6	75.9	64.3	103.3	159.6	140.9	226.9
Value of imports:												
Total (mil. dol.)	5.0	5.4	3.3	2.1	.6	.7	7.8	6.4	7.4	10.5	14.5	23.3
Per pound (cents)	10.7	9.6	9.2	9.0	10.0	11.0	10.2	10.0	7.2	6.6	10.3	10.3

1/ Preliminary. 2/ Less than 50,000 pounds.
SOURCE: Bureau of the Census.

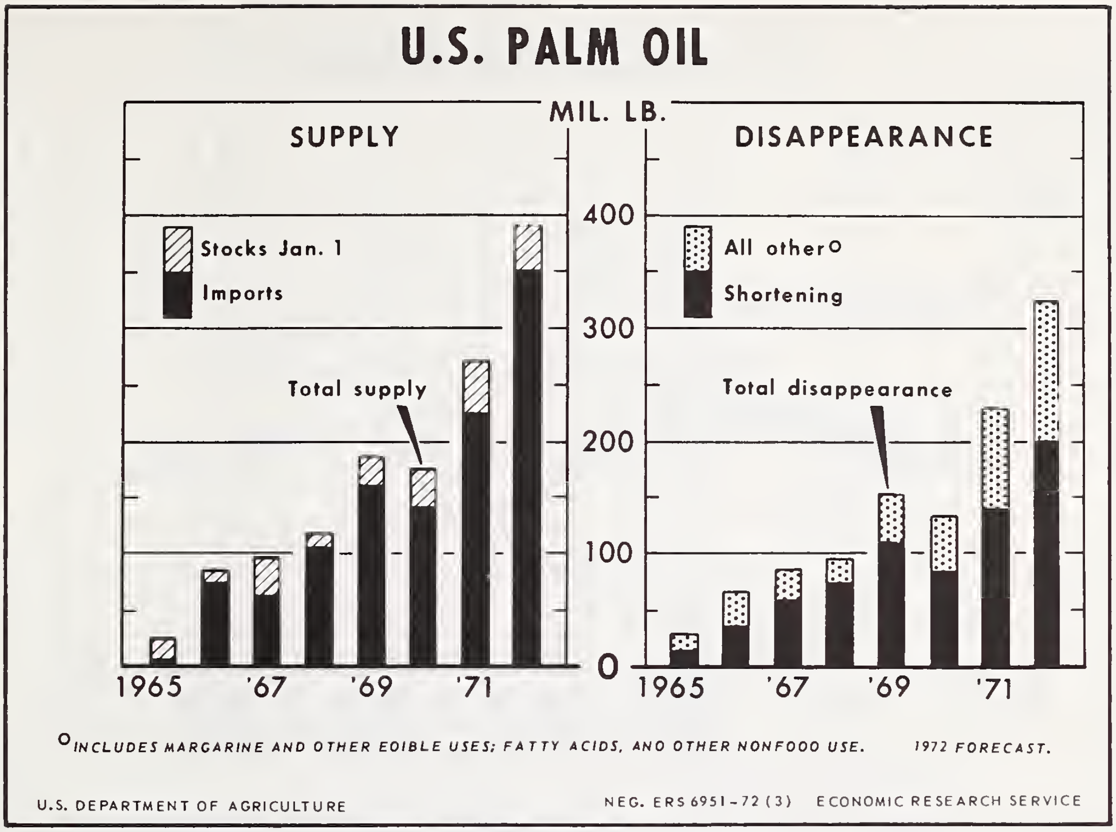

Figure 1

million pounds in 1967 to 140 million in 1971. Small quantities are also consumed in margarine and other edible products.

Record-high domestic consumption of palm oil occurred in 1937 when 400 million pounds were imported. At that time, soap was the largest market, comprising nearly half of total U.S. disappearance. Since World War II only small quantities have been used in soap. Palm oil does not have the quick-lathering properties of coconut and palm kernel oils, which make them useful in the toilet soaps still in demand.

Fats and oils used in shortening

Oil or fat	Calendar year		
	1969	1970	1971
	Million pounds	*Million pounds*	*Million pounds*
Soybean	2,101	2,182	2,047
Cottonseed	248	276	168
Palm	110	85	140
Coconut	47	45	56
Total	2,506	2,588	2,411
All vegetable oils	2,548	2,623	2,441
Animal fats[1]	958	976	1,037
All fats and oils	3,506	3,599	3,479

[1] Lard and beef fats.

Inedible uses of palm oil rose from 24 million pounds in 1967 to 71 million last year. Unfortunately, census data are not available on specific end-uses in inedible products—such as soap, fatty acids, tin and terne plating, lubricants, and similar oils. Any shift from phosphate detergents to fat-based soap compounds likely would increase the demand for palm oil, tallow, and vegetable oil foots.

Rising Share of Domestic Market

The increasing palm oil imports at competitive prices have cut into the traditional markets for cottonseed and soybean oils. As shown below, domestic use of the 4 major U.S. edible oils has fallen off since 1970 while use of palm oil has increased.

Domestic use of selected edible oils

Oil	Calendar year		
	1970	1971	1972[1]
	Million pounds	*Million pounds*	*Million pounds*
Soybean	6,312	6,269	6,400
Cottonseed	1,051	804	750
Corn	452	430	425
Peanut	163	195	225
Total	7,978	7,698	7,800
Palm oil	133	230	325
% of domestic oils	1.7%	3.0%	4%

[1] Forecast.

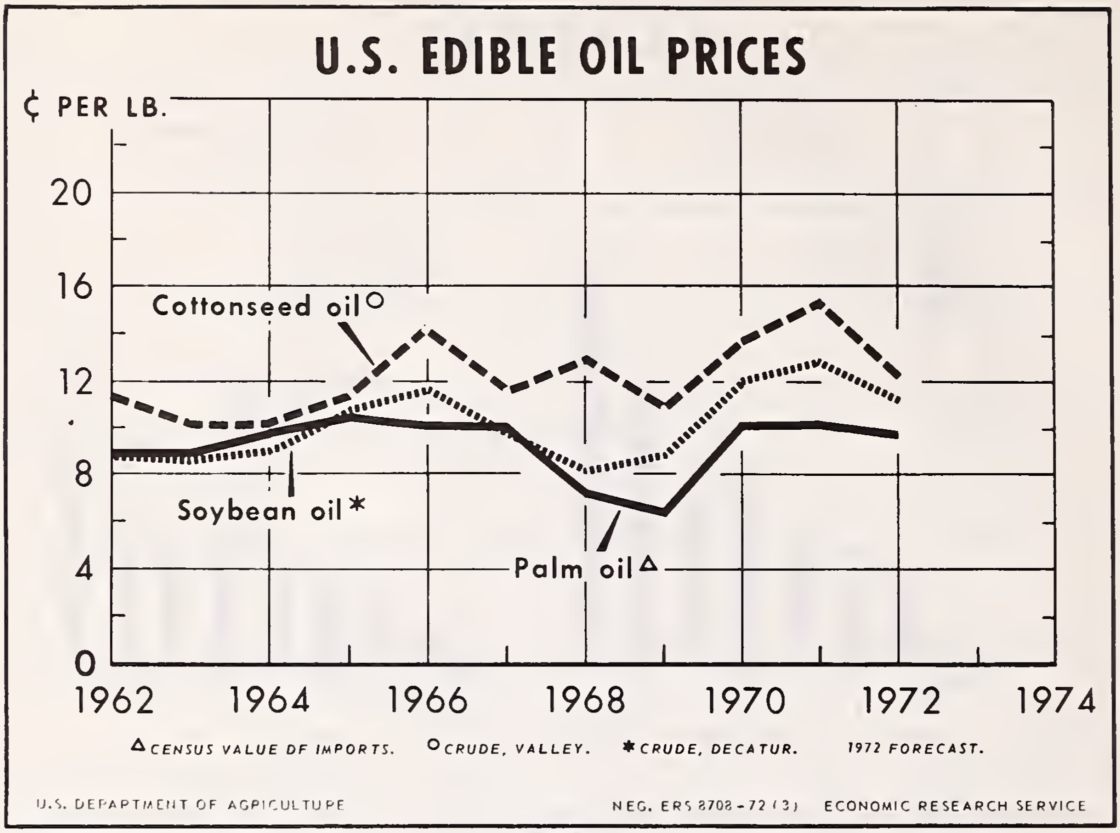

Figure 2

The potential for increased use of palm oil in both food and industrial products in the United States looms large.

World Production Doubles in 5 Years

World palm oil production is nearly doubling within 5 years, rising from 1,273,000 metric tons in 1967 to 2,250,000 tons forecast for 1972 (table 13). About one-half of the 1 million-ton-increase has been in Malaysia, the world's leading producer of palm oil which in 1972 probably will account for about one-third of world output. Indonesia, Zaire, and Ivory Coast have also increased output sharply in recent years. These 4 countries and Nigeria account for four-fifths of palm oil output.

Large areas of oil palms have been planted in recent years and are still being planted in a number of countries. The rate of production expansion is expected to increase as a larger proportion of the plantation acreage planted in recent years comes into bearing. New trees require 4 to 5 years before bearing fruit and do not reach maximum yields until about the tenth year. They remain commercially productive until they are about 30 to 35 years old, after which the height makes harvesting difficult.

Economic reasoning behind the expansion in oil palms varies between countries. According to a recent FAO study, the key factors in Malaysia and Indonesia are diversification of agricultural production and of the sources of export earnings. Production conditions there are particularly favorable and most of the increase in palm oil and palm kernel oil output will be exported, although domestic consumption of these oils is also likely to grow. In some African countries, such as Nigeria, Zaire, and Sierre Leone, where palm oil is the major oil consumed domestically, most of the increased supplies will be needed to meet the rapidly growing local demand, although efforts are also likely to be made to maintain or expand exports. Other African countries such as Ivory Coast, Cameroon, and Dahomey, which until now consumed most of their production, will have increased quantities for export. Also, there are other countries—such as Colombia and Ecuador—where cultivation of the oil palm is relatively recent and the primary objective is to replace oil imports, thus economizing on scarce foreign exchange resources.

High Yields Per Acre

Oil palms, a perennial crop, are harvested throughout the year. The fruits ripen in about 6 months, so 2 crops per year are obtained. Most other oilseed crops are annuals and the harvest is seasonal.

The African oil palm cultivated in plantations yields more edible vegetable oil per acre—from one-half to 2 tons or more—than any other fat-bearing plant[2]. U.S. soybeans yield around 300 pounds of oil per acre.

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[2] The oil palm is native to West Africa and therefore is called the African oil palm.

Table 13.--Palm oil: Estimated world production and exports, by major countries, 1967-72, projected 1980

PRODUCTION

Country	1967		1968		1969		1970		1971 1/		1972 2/		1980 Projected 3/		
	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	% of 1970
	Thou. metric tons	Percent	Thou. metric tons	Percent	Thou. metric tons	Percent	Thou. metric tons	Percent	Thou. metric tons	Percent	Thou. metric tons	Percent	Thou. metric tons	Percent	Percent
Major producers:															
Malaysia	226	17.8	283	20.2	351	22.3	429	24.0	590	29.3	740	33	1,600	43	375
Nigeria	320	25.1	336	23.9	418	26.6	488	27.3	500	24.8	510	23	650	17	135
Indonesia	174	13.7	188	13.4	189	12.0	215	12.0	225	11.1	240	11	400	11	185
Zaire	194	15.2	230	16.4	225	14.3	228	12.7	230	11.4	235	10	275	7	120
Ivory Coast	30	2.4	31	2.2	37	2.4	59	3.3	80	4.0	110	5	230	6	390
Dahomey	36	2.8	38	2.7	42	2.7	44	2.5	48	2.4	52	2	100	3	225
Cameroon	31	2.4	32	2.3	33	2.1	36	2.0	37	1.8	40	2	95	3	265
Colombia	9	.7	15	1.1	21	1.3	26	1.4	34	1.7	44	2	50	1	190
Sierra Leone	40	3.2	40	2.8	41	2.6	41	2.3	42	2.1	47	2	60	2	145
Total	1,060	83.3	1,193	85.0	1,357	86.3	1,566	87.5	1,786	88.6	2,018	90	3,450	93	220
Other countries:	213	16.7	210	15.0	215	13.7	224	12.5	229	11.4	232	10	250	7	110
World total	1,273	100.0	1,403	100.0	1,572	100.0	1,790	100.0	2,015	100.0	2,250	100.0	3,710	100	210
							EXPORTS								
Major exporters:															
Malaysia, West	180	35.7	268	41.7	331	46.6	370	49.0	535	56.3	685	60	1,500	66	400
Indonesia	141	28.0	170	26.5	182	25.6	180	23.9	195	20.5	210	18	350	16	200
Zaire	115	22.8	141	22.0	125	17.6	124	16.4	120	12.7	120	10	150	7	125
Total	436	86.5	579	90.2	638	89.8	674	89.3	850	89.5	1,015	88	2,000	89	300
Other countries:	68	13.5	63	9.8	72	10.2	81	10.7	100	10.5	135	12	250	11	300
World total	504	100.0	642	100.0	710	100.0	755	100.0	950	100.0	1,150	100	4/2,250	100	300
							EXPORTS AS PERCENT OF INDIGENOUS PRODUCTION								
Major exporters:	1967		1968		1969		1970		1971		1972		1980		
							-- Percent --								
Malaysia	79.6		94.7		94.3		86.2		90.7		93		94		
Indonesia	81.0		90.4		96.3		83.7		86.7		88		88		
Zaire	59.3		61.3		55.6		54.4		52.2		51		55		
Total	73.4		82.6		83.4		77.3		81.3		84		88		
Other countries:	10.0		9.0		8.9		8.8		10.3		13		17		
World total	39.6		45.8		45.2		42.2		47		51		60		

1/ Preliminary. 2/ Forecast. 3/ FAO projections (November 1971). Low alternative production projection for 1980 is 3.1 million tons and high is 4.4 million tons.
4/ Export availabilities based on lower consumption levels in major producing countries.

SOURCE: Fats and Oils Division, Foreign Agricultural Service, except 1980 projections which are those of the Food and Agriculture Organization of the United Nations.

The newer high-yielding varieties of African oil palm also yield more palm oil relative to palm kernels than older varieties. The fruit has a higher proportion of pulp—containing the palm oil—and a smaller nut. The palm kernel yield is now about 20% of the yield of palm oil. Thus, palm oil output likely will continue to increase at a much faster rate than that of palm kernel oil.

Composition of the palm fruit is roughly: Pericarp (outer fleshy pulp) 40 to 70%; shell 30 to 40%; and kernel 7 to 12%. Palm oil is extracted from the pericarp, which varies widely in oil yield—20 to 50%—depending upon variety, growing conditions, and processing methods. Palm kernel oil is extracted from the fruit's kernels, which contain between 44 and 53% oil. Palm kernel oil production ranges between 20 and 40% of the volume of palm oil produced.

Processing of palm fruit for oil occurs only where oil palms are grown, because the fruit is perishable. But palm kernels are storable and large quantities are exported for crushing in importing countries.

The integration of palm oil processing mills with technical management in the production, harvesting, and processing areas has resulted in a maximum recovery of high quality oil.

Palm oil production has risen the most among the oils in the palm family since 1960, and in 1972 may be only about a tenth below coconut oil. In 1960 it was a third below coconut oil.

World production of fats and oils

Type	1960	1965	1970	1971[1]	1972[2]
	1,000 metric tons	*1,000 metric tons*	*1,000 metric tons*	*1,000 metric tons*	*1,000 metric tons*
Palm family:					
Coconut	1,960	2,135	2,110	2,400	2,550
Palm kernel	430	435	410	465	500
Palm	1,285	1,385	1,790	2,015	2,250
Babassu kernel	58	54	102	107	110
Total palm	3,733	4,009	4,412	4,987	5,410
Total fats and Oils	29,593	35,156	39,236	41,373	42,922
Percent of total:					
Palm family	12.6%	11.4%	11.2%	12.1%	12.6%
Palm oil	4.3%	3.9%	4.6%	4.9%	5.2%

[1] Preliminary. [2] Forecast.

SOURCE: Foreign Agricultural Service, Fats and Oils Division.

Malaysia World's Leading Exporter

World exports of palm oil have increased steadily from 504,000 metric tons in 1967 (40% of world production) to 1,150,000 tons forecast for 1972 (51%). Three countries—Malaysia, Indonesia, and Zaire—account for about 90% of the total (table 13). Exports from Nigeria, the world's second largest producer of palm oil, are relatively small because of its own rising oil requirements.

Malaysia has accounted for the bulk of the increase in world exports of palm oil—shipping 180,000 tons in 1967 and 685,000 in 1972. This year Malaysia probably will account for three-fifths of world exports of palm oil, exporting over 90% of its domestic output.

Favorable economic conditions for longterm investment in new oil palm estates and some shift and diversification from rubber to oil palm are factors contributing to the sharp increase in Malaysian production and export availabilities.

In 1972, Indonesia probably will account for one-fifth of world exports of palm oil and Zaire about one-tenth.

Twice As Much Palm Oil by 1980; Sharper Rise For Exports[3]

According to a recent FAO study, world production of palm oil is projected to increase by about 2 million tons or 110% over the decade to reach 3.7 million tons by 1980. Export availabilities would increase even more rapidly than output, reaching some 2 million tons, about triple the 1970 level.

Looking at it another way, world exports by 1980 could be one-fourth greater than total palm oil output was in 1970. The FAO projections could prove conservative as yields and planting rates may exceed those assumed in the analysis.

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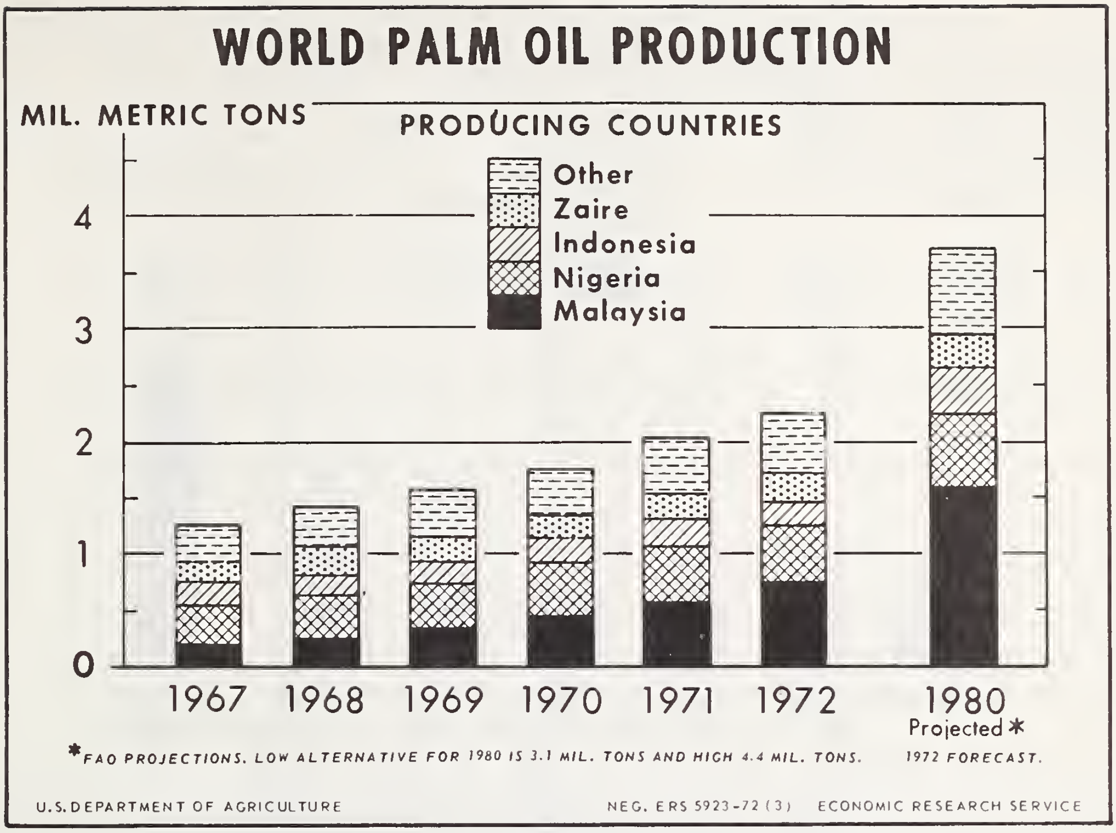
[3] This section is largely from an FAO paper entitled "Prospects for Supplies of Palm Oil and Palm Kernels to 1980," Food and Agriculture Organization of the United Nations, CCP: of 72/2,November 1971. In addition to the projections for 1980 the paper also provides information on projects financed by 6 major international banks and development funds. The role of international financing agencies which will lead to increased production of oil palm products is shown to be quite substantial.



WORLD PALM OIL PRODUCTION

*FAO PROJECTIONS. LOW ALTERNATIVE FOR 1980 IS 3.1 MIL. TONS AND HIGH 4.4 MIL. TONS. 1972 FORECAST.

U.S. DEPARTMENT OF AGRICULTURE NEG. ERS 5923-72 (3) ECONOMIC RESEARCH SERVICE

Figure 3

The FAO estimates for 1980 are shown for the 9 most important producing countries in table 13 for palm oil and table 18 for palm kernels. Of all the various fats and oils, output of palm oil and palm kernel oil will grow the fastest between 1970 and 1980—about 8% and 6% per year respectively, compared with 3% for all oils and fats. The volume of increase in palm oil production by 1980 is exceeded only by that projected for soybean oil.

During the 1960's output of palm oil grew at an average annual rate of 2.7% and the rate was increasing near the end of the decade.

Palm oil will account for an increasingly large share of total world production of fats and oils during the 1970's. By 1980 it is expected to account for nearly 7% of total world supplies as against 4% in 1970.

Malaysia will be the biggest producer of palm oil by 1980, with output rising about 14% a year and reaching 1.6 million tons by 1980. It would account for over 40% of world production and its output would be 2½ times greater than any other country. The Ivory Coast and Indonesia are likely to show sharp increases in oil palm production, while Nigeria and Zaire, historically the 2 major producers, are expected to show quite small increases. Colombia is the only Latin American country that is likely to reach an output of 50,000 tons by 1980.

Malaysia already accounts for over half of world exports of palm oil and its likely growth in output, coupled with the relatively low proportion of output to be used for home consumption, indicates that its share of the world market for palm oil will increase further over the decade—possibly to around two-thirds. Indonesia will probably be the next largest exporter in 1980.

Export availabilities of palm oil, based on output estimates, would require an annual growth in exports of about a tenth.

The pattern of palm kernel output differs from that of palm oil. This is partly due to the varying importance of wild oil palms but mainly because countries showing the most rapid increase in output have planted new types of palms with a low ratio of palm kernel oil output relatively to palm oil.

U.S. Palm Kernel Oil Imports Up This Year

Prospects for palm kernel oil (edible) imports into the United States are not as spectacular as for palm oil. Palm kernel oil imports and domestic use remained relatively stable over the past 5 years, averaging aound 100 million pounds per year (table 14). Imports and use so far this year are up and for all 1972 probably will exceed 100 million pounds (table 16).

Palm kernel oil is high in lauric acid, similar to coconut oil, and the 2 are often used interchangeably in specialty products. High lauric acid oils are used by the baking and confectionery industries in "coatings" on

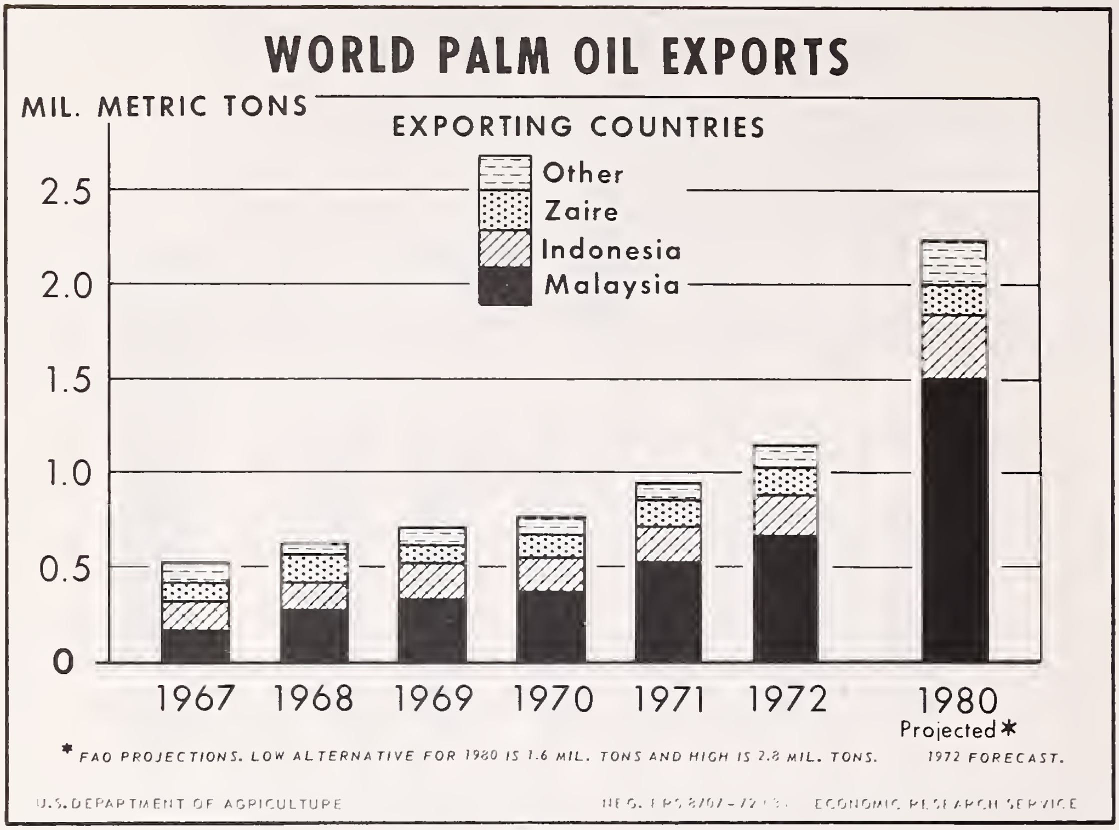


Figure 4

cookies and candies, principally because they provide resistance against rancidity and extend the "shelf life" of these products.

Edible-grade palm kernel oil is dutiable at 0.5 cent per pound; the inedible grade enters duty free but imports are negligible. The United States does not grow commercially any oil-bearing crops containing lauric acid.

Edible uses of palm kernel oil are mainly in the manufacture of confectioneries, biscuits, crackers and other baking goods, popcorn, and other specialty products. Small quantities are also consumed in shortening and margarine manufacture. The price of imported palm kernel oil is usually significantly higher than prices of edible oils produced domestically. It usually fluctuates with coconut oil prices. The inedible grade of palm kernel oil is used chiefly in making fatty acids and quick-lathering soaps.

About 90% of the palm kernel oil consumed in the United States is believed to be used in food products, competing with imported coconut oil (table 15). The Census Bureau publishes little end-use data for palm kernel oil. As a matter of fact, the "other edible" category represents about 90% of the total apparent domestic usage. Such "basket" classifications are meaningless for analyzing marketing trends.

United States Leading Importer

The United States is a major importer of palm kernel oil—about one-third of the world's total—but does not import kernels for crushing. Of the 96 million pounds of oil imported in 1971, Africa (Congo and Dahomey) supplied about one-half, the Netherlands about one-third (probably of Nigerian origin) and Japan about one-eighth (table 17). Palm kernel oil is produced in both palm-growing countries and oil-importing countries. The latter, mainly European countries, produce the oil from kernels received from palm-growing countries.

U.S. imports and usage of palm kernel oil probably will expand. However, the annual volume will vary with the availability and price of coconut oil (the predominant lauric-acid oil), imported almost entirely from the Philippines. In 1971, the U.S. disappearance of coconut oil was about 875 million pounds—about 10 times that of palm kernel oil.

World production of palm kernels is forecast by FAO to expand a third by 1980, sharply greater than prospective gains in coconut oil output (table 18). This points to larger quantities becoming available for export on the world market.

Table 14.--Palm kernel oil (edible): U.S. supply, disposition and price, 1950-72

Calendar year	Supply				Disposition		Price per pound	
	Apparent production from imported materials 1/	Imports	Stocks Jan. 1	Total	Exports	Domestic disappearance	Bulk, c.i.f., New York	Congolese, 5% c.i.f., European ports
	-- Million pounds --						Cents	Cents
1950	8	20	---	28	---	28	---	---
1951	6	5	2/	11	---	3/11	---	---
1952	---	11	2/	11	---	3/11	---	---
1953	---	51	3	54	---	50	---	---
1954	---	50	3	53	---	43	---	---
1955	---	46	10	56	---	50	---	---
1956	---	41	6	47	---	45	---	---
1957	---	50	1	51	---	48	---	---
1958	---	51	3	54	---	51	---	---
1959	---	71	3	74	---	66	16.4	---
1960	---	88	8	96	---	78	14.1	13.3
1961	---	84	18	102	---	87	11.2	10.7
1962	---	84	16	100	---	84	10.9	10.3
1963	---	83	16	99	---	79	12.5	12.2
1964	---	85	20	105	---	83	13.3	13.0
1965	---	83	21	104	---	87	15.4	15.7
1966	---	109	17	126	---	97	12.9	12.3
1967	---	104	30	134	---	118	13.1	11.4
1968	---	121	16	137	---	112	17.6	4/
1969	---	99	24	123	---	102	5/	
1970 6/	---	83	22	105	---	86		
1971 6/	---	96	19	115	---	89		
1972 7/	---	110	25	135	---	110		

1/ Estimated from reported consumption, change in stocks, and net foreign trade. 2/ Less than 500,000 pounds. 3/ Beginning stocks assumed to be the same as ending stocks. 4/ Price quotes discontinued May 1967. 5/ Price quotes discontinued May 1968. 6/ Preliminary. 7/ Forecast.

Table 15.--Palm kernel oil (edible): U.S. utilization, by products, 1950-71

Calendar year	Food					Nonfood				Total domestic disappearance
	Shortening	Margarine	Salad and cooking oils	Other	Total	Soap	Foots and loss	Other	Total	
	-- Million pounds --									
1950	4	---	---	22	26	1/	1	1/	2	28
1951	8	2	---	1	11	---	---	1	1	11
1952	---	---	---	11	11	---	---	---	---	11
1953	3	2	---	15	20	23	6	2	31	50
1954	3	1	---	28	32	6	5	1/	12	43
1955	7	1	---	28	36	5	5	4	14	50
1956	7	1	---	34	42	1	1	1	3	45
1957	3	3	---	42	47	---	1/	---	1	48
1958	---	---	---	47	47	---	4	---	4	51
1959	---	---	---	49	49	11	6	1	17	66
1960	---	---	---	53	53	12	7	7	26	78
1961	---	2	2/3	54	59	14	8	6	28	87
1962	---	---	---	70	70	5	8	2	15	84
1963	---	---	---	69	69	---	8	2	10	79
1964	---	---	---	67	67	---	11	5	16	83
1965	---	---	---	77	77	---	8	2	10	87
1966	---	---	---	87	87	---	7	3	10	97
1967	---	---	---	108	108	---	4	6	10	118
1968	---	---	---	97	97	---	15	1	15	112
1969	---	---	---	93	93	---	9	---	9	102
1970 3/	2	---	---	76	78	---	7	---	7	86
1971 3/	4	1	---	77	82	---	7	---	7	89

1/ Less than 500,000 pounds. 2/ Included in other food category in earlier years. 3/ Preliminary.

Table 16.--Palm kernel oil (edible): U.S. supply, domestic use and value of imports, by months, 1969-72

Year and Item	Unit	January	February	March	April	May	June	July	August	September	October	November	December	Total or average
1969														
Beginning stocks	Mil. lb.	24	16	20	20	29	32	25	26	26	20	20	22	
Imports	Mil. lb.	4	7	13	11	13	4	9	9	6	6	12	7	99
Domestic use	Mil. lb.	11	3	13	2	10	10	8	9	11	6	9	7	102
Value of imports per pound	Cents	11.5	13.1	12.5	13.7	13.9	14.1	12.9	14.2	13.3	13.5	11.2	13.3	13.1
1970														
Beginning stocks	Mil. lb.	22	21	20	17	21	24	20	19	19	15	18	17	
Imports	Mil. lb.	5	5	6	9	7	6	6	6	4	7	10	10	83
Domestic use	Mil. lb.	6	6	10	5	4	10	7	5	8	4	11	8	86
Value of imports per pound	Cents	16.1	14.3	14.6	14.1	14.5	14.5	13.6	15.5	16.8	15.0	15.0	14.0	14.7
1971 1/														
Beginning stocks	Mil. lb.	19	24	20	20	22	23	23	23	29	26	26	25	
Imports	Mil. lb.	8	10	7	13	10	7	3	8	12	1	9	8	96
Domestic use	Mil. lb.	2	14	7	12	8	7	3	2	15	1	10	8	89
Value of imports per pound	Cents	15.4	14.9	16.9	15.6	15.9	14.4	21.3	16.3	14.1	---	14.5	13.4	15.2
1972 1/														
Beginning stocks	Mil. lb.	25	25	29										
Imports	Mil. lb.	11	13											
Domestic use	Mil. lb.	12	8											
Value of imports per pound	Cents	15.0	15.0											

1/ Preliminary. Imports, value of imports, and stocks are from Bureau of Census.

Table 17.--Palm kernel oil (edible): U.S. imports by country of origin and value, 1960-71

Country of origin	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971 1/
						-- Million pounds --						
Europe:												
Belgium	---	.4	---	---	---	.9	.9	1.5	.9	3.1	.7	---
Denmark	---	2/	.1	1.3	.1	2/	1.9	2.2	4.8	2.8	1.8	.4
Germany, West	---	12.7	8.2	3.4	6.7	13.6	2.2	3.9	6.8	3.4	2.0	1.1
Netherlands	16.5	12.4	16.0	21.6	23.9	36.5	32.7	28.1	26.8	17.9	23.9	29.3
United Kingdom	12.2	1.1	11.8	17.8	1.1	.2	---	.3	---	---	---	---
Other	---	---	---	.7	---	---	---	---	---	---	2/	.9
Total	28.7	26.6	36.1	44.8	31.8	51.2	37.7	36.0	39.3	27.2	28.4	31.7
Asia:												
Indonesia	---	---	---	---	---	---	2.2	---	1.1	---	---	1.2
Japan	---	1.1	5.8	3.6	3.2	6.4	5.0	.5	1.5	4.9	6.7	12.3
Malaysia	---	---	---	---	---	---	---	---	---	3.0	---	1.6
Philippines	---	---	---	---	---	---	---	---	---	---	1.1	---
Total	---	1.1	5.8	3.6	3.2	6.4	7.2	.5	2.6	7.9	7.8	15.1
Africa:												
Nigeria	---	---	---	---	---	---	10.8	4.5	---	1.2	---	1.2
Republic of Congo	59.6	56.3	42.4	35.1	50.1	23.4	36.8	31.9	38.0	34.9	32.3	32.8
Other	---	---	---	---	---	1.9	16.8	31.3	40.6	27.5	13.9	14.9
Total	59.6	56.3	42.4	35.1	50.1	25.3	64.4	67.7	78.6	63.6	46.2	48.9
Other	---	---	---	---	---	---	---	---	---	.7	---	---
Grand total	88.3	84.0	84.2	83.5	85.1	83.1	109.4	104.4	120.6	99.4	82.5	95.8
Value of imports:												
Total (mil. dol.)	12.9	9.9	8.9	10.1	10.5	12.4	14.8	12.8	19.3	13.0	12.1	14.6
Per pound (cents)	14.6	11.8	10.6	12.1	12.3	14.9	13.5	12.2	16.0	13.1	14.7	15.2

1/ Preliminary. 2/ Less than 50,000 pounds.
SOURCE: Bureau of Census.

Table 18.--Palm kernels: Estimated world production and exports, by major countries, 1967-72, projected 1980

Country	1967		1968		1969		1970		1971 1/		1972 2/		1980 projected 3/		
	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	% of 1970
	Thou. metric tons	Percent	Thou. metric tons	Percent	Thou. metric tons	Percent	Thou. metric tons	Percent	Thou. metric tons	Percent	Thou. metric tons	Percent	Thou. metric tons	Percent	Percent
	PRODUCTION														
Major producers:															
Malaysia	51	6.7	63	8.1	78	9.5	92	10.6	125	12.7	155	14	320	21.6	350
Nigeria	250	32.8	225	29.1	260	31.8	270	31.1	320	32.4	340	32	450	30.4	170
Indonesia	35	4.6	40	5.2	42	5.1	48	5.5	50	5.1	53	5	80	5.4	170
Zaire	93	12.2	105	13.6	98	12.0	107	12.3	109	11.0	110	10	130	8.8	120
Ivory Coast	13	1.7	14	1.8	15	1.8	19	2.2	30	3.0	42	4	65	4.4	230
Dahomey	40	5.3	57	7.4	65	7.9	60	6.9	62	6.3	65	6	90	6.1	150
Cameroon	50	6.6	51	6.6	52	6.4	56	6.4	58	5.9	60	6	75	5.1	135
Colombia	---	---	---	---	---		---		---	---	---		12	.8	---
Sierra Leone	57	7.5	53	6.9	52	6.4	57	6.6	60	6.1	64	6	70	4.7	125
Total	589	77.4	608	78.7	662	80.9	709	81.6	814	82.5	889	83	1,292	87.3	180
Other Countries:	172	22.6	165	21.3	156	19.1	160	18.4	173	17.5	186	17	188	12.7	120
World total	761	100.0	773	100.0	818	100.0	869	100.0	987	100.0	1,075	100	1,480	100.0	170
(Oil equivalent)	355		365		385		410		465		500		700		
	EXPORTS														
Major exporters:															
Nigeria	165	45.0	162	38.7	179	41.3	185	40.9	250	45.0	270	44			
Indonesia	38	10.4	35	8.4	42	9.7	50	11.1	52	9.4	53	9			
Malaysia	24	6.5	33	7.9	34	7.8	22	4.9	35	6.3	45	8			
Sierra Leone	12	3.3	65	15.5	49	11.3	59	13.1	62	11.2	64	10			
Cameroon	20	5.4	27	6.5	23	5.3	13	2.9	13	2.3	15	2			
Ivory Coast	10	2.7	9	2.2	13	3.0	18	4.0	30	5.4	43	7			
Dahomey	4	1.1	7	1.7	8	1.8	11	2.4	13	2.3	15	2			
Total	273	74.4	338	80.9	348	80.2	358	79.2	455	82.0	505	82			
Other Countries:	94	25.6	80	19.1	86	19.8	94	20.8	100	18.0	110	18			
World total	367	100.0	418	100.0	434	100.0	452	100.0	555	100.0	615	100			

1/ Preliminary. 2/ Forecast. 3/ FAO projections (November 1971. Low alternative production forecast 1.3 million tons and high is 1.64 million tons.
SOURCE: Fats and Oils Division, Foreign Agricultural Service, except 1980 projections which are those of the FAO.

Table 19.--Palm kernel oil: Estimated world exports, by major countries, 1967-72

Country	1967		1968		1969		1970		1971 1/		1972 2/	
	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world
	Thou. metric tons	Percent	Thou. metric tons	Percent	Thou. metric tons	Percent	Thou. metric tons	Percent	Thou. metric tons	Percent	Thou. metric tons	Percent
Major exporters:												
Zaire	42	39.3	45	43.7	42	37.2	50	42.0	51	41.8	52	42
Nigeria	38	35.5	27	26.2	37	32.7	33	27.7	32	26.2	32	26
Dahomey	17	15.9	23	22.3	20	17.7	22	18.5	22	18.1	22	17
Other	10	9.3	8	7.8	14	12.4	14	11.8	17	13.9	19	15
World total	107	100.0	103	100.0	113	100.0	119	100.0	122	100.0	125	100
World exports of palm kernels (oil basis)	173		197		204		212		263		290	
Combined exports palm kernels (oil basis) and palm kernel oil	280		300		317		331		385		415	

1/ Preliminary. 2/ Forecast. SOURCE: Fats and Oils Division, Foreign Agricultural Service.

SEASONALITY IN TALLOW PRODUCTION AND USE

By

Stanley A. Gazelle

Abstract: Inedible tallow, an important component of the U.S. fats and oils industry, has shown spectacular growth over the past 2 decades, and further expansion is likely. Seasonal patterns of production, use, and prices show definite but not extremely large variations. For seasonal indexes using 1968-70 data, production and prices varied the least, ranging about 10 percentage points between the peaks and troughs. Exports showed the most variation, with a range of about 35 percentage points. Seasonality of domestic use, stocks, and use of tallow in animal feeds, soap, lubricants, and fatty acids fell between these ranges. Most seasonal patterns showed some change from those in earlier years studied.

KEY WORDS: Inedible tallow production and use, seasonal variation, seasonal indexes.

Inedible tallow, a raw material in the U.S. fats and oils industry, ranks second only to soybean oil in terms of volume produced and used. Over the past 20 years, production has more than doubled, expanding from a little under 2.5 billion pounds in the early 1950's to an estimated 5.3 billion in the current marketing year.

Tallow is primarily a byproduct of the commercial beef industry. Production has increased dramatically in line with the expansion in beef output. Continued growth is expected, as the production of beef continues to expand. Based on projections for cattle slaughter and beef output, inedible tallow production by 1980 will approximate 7 billion pounds, an increase of about a third during the 1970's.[1]

As increasing quantities of inedible tallow became available at favorable prices, usage also increased, both domestically and abroad. Today, it is one of the most important fats in world trade, and also one of the cheapest. The United States accounts for over one-half of total world output.

Domestic use has increased from around 1.6 billion pounds 20 years ago to an estimated 2.7 billion pounds this marketing year. Tallow is widely used in many manufactured industrial products. The principal outlets are in animal feeds, soap making, fatty acids, and lubricants, which account for about 90% of the volume used.

Today, use in animal feeds is the most important single outlet, utilizing over 1 billion pounds or about 40% of total domestic disappearance. Earlier, this category took less than 100 million pounds. At one time, soap was the major market. However, competition from synthetic detergents, which began in the late 1940's, reduced usage in soap by about a half. Today, soap making absorbs about 600 million pounds, or approximately a fourth of the total. Use in fatty acids accounts for another 600 millions pounds. This outlet has increased nearly 2½ times. The remaining tenth is used in lubricants and other miscellaneous items.

The most dramatic growth has occurred in exports, where volume more than quadrupled in the 20-year period to the recent level of 2.6 billion pounds. As production increased faster than domestic use, the readily available quantities at favorable prices attracted foreign buyers. The major markets are Asia and Western Europe, which together account for about two-thirds of total exports. Most of these exports are for commercial dollar sales.

SEASONAL VARIATION

The production and use of tallow vary over the course of the year in a regular pattern. These fluctuations are due to natural and man-made forces that occur again and again at periodic intervals. They can be measured by means of an index of seasonal variation. Seasonal variations are of interest because they reveal generally regular month-to-month changes within the year around the secular trend, and provide a measure of the magnitude of these changes.

Measurement of seasonal variation is useful in analyzing economic developments and in making business decisions. Data properly adjusted for seasonal variation are easier to interpret and can reveal significant changes.

In this study, the Bureau of the Census method of seasonal adjustment was used to provide a rough measure of the relative importance of seasonal change in comparison with other elements that contribute to

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[1] "U.S. Tallow and Grease Production and Marketing Trends", FOS-260, November 1971.

Table 20.--Tallow, inedible, and greases: Supply, disposition and price, 1950-71

Year beginning October	Supply				Disposition			Price per pound Chicago	
	Apparent production 1/	Imports	Stocks, Oct. 1	Total	Exports and shipments	Domestic disappearance: Total	Domestic disappearance: Per capita	Prime	No. 1
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Pounds	Cents	Cents
1950	2,343	4	279	2,626	509	1,777	11.7	13.5	11.9
1951	2,268	1	340	2,609	720	1,550	10.0	6.3	5.1
1952	2,616	1	340	2,957	1,070	1,523	9.7	4.3	3.6
1953	2,661	3	363	3,027	1,186	1,574	9.8	6.2	5.6
1954	2,875	4	268	3,147	1,265	1,620	9.9	7.0	6.5
1955	3,215	2	260	3,477	1,494	1,677	10.1	6.9	6.3
1956	3,147	3	306	3,456	1,431	1,786	10.6	7.1	6.6
1957	2,896	2/	239	3,135	1,107	1,799	10.5	7.6	7.0
1958	3,214	2	230	3,444	1,311	1,808	10.3	6.6	6.0
1959	3,540	2/	327	3,867	1,718	1,806	10.2	5.2	4.5
1960	3,561	2/	343	3,904	1,769	1,745	9.7	6.0	5.3
1961	3,776	2	389	4,167	1,710	2,093	11.4	5.1	4.6
1962	3,829	2	365	4,196	1,738	2,124	11.4	5.0	4.5
1963	4,604	2	334	4,940	2,338	2,320	12.2	5.9	5.4
1964	4,461	2	282	4,743	2,155	2,239	11.7	7.8	7.3
1965	4,419	1	351	4,770	1,962	2,393	12.3	7.3	6.8
1966	4,766	4	417	5,187	2,214	2,565	13.0	5.5	5.0
1967	4,751	6	409	5,166	2,212	2,577	12.9	4.6	4.2
1968	4,601	4	377	4,982	2,009	2,670	13.2	5.8	5.4
1969	4,830	7	304	5,141	2,051	2,721	13.3	7.5	7.0
1970 3/	5,252	7	370	5,629	2,591	2,628	12.8	7.6	6.8
1971 4/	5,300	5	410	5,715	2,550	2,750	13.2	5/6.2	5/5.8

1/ Apparent production computed from Census factory consumption, net foreign trade, and change in stocks. 1966-69 Census reported production. 2/ Less than 500,000 pounds. 3/ Preliminary. 4/ Forecast. 5/ Oct.-Feb. average.

Table 21.--Tallow, inedible, and greases: Utilization, by products, 1950-70

Year beginning October	Non-food products						
	Soap	Animal feeds	Fatty acids	Lubricants and similar oils	Other	Loss	Total
	-- Million pounds --						
1950	1,280	---	250	28	217	1	1,777
1951	1,103	---	199	24	224	---	1,550
1952	1,008	---	237	24	252	1	1,523
1953	967	71	245	25	258	8	1,574
1954	861	174	267	38	268	12	1,620
1955	840	263	290	38	229	17	1,677
1956	788	383	284	34	285	13	1,786
1957	744	542	249	29	232	3	1,799
1958	732	476	353	66	182	---	1,808
1959	735	439	391	80	162	---	1,806
1960	732	443	351	70	151	---	1,745
1961	702	732	402	79	177	---	2,093
1962	688	774	433	78	151	---	2,124
1963	660	861	478	91	230	---	2,320
1964	690	714	530	102	203	---	2,239
1965	649	855	575	107	208	---	2,393
1966	665	972	547	98	283	---	2,565
1967	631	990	576	89	291	---	2,577
1968	637	1,061	585	98	289	---	2,670
1969	601	1,093	610	97	320	---	2,721
1970 1/	616	1,140	568	89	214	---	2,628

1/ Preliminary. Data based on Census reports.

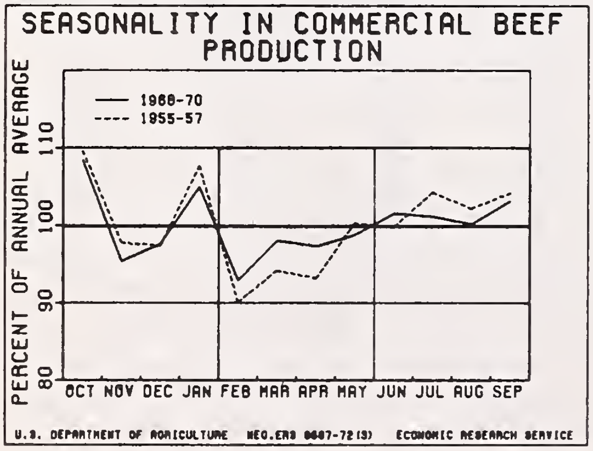
month-to-month change.[2] Monthly indexes of variation were constructed from basic data for inedible tallow production, stocks, domestic disappearance, exports, and prices. The recent 3-year period (marketing years 1968-70, year beginning October 1) was compared with 1955-57 to detect changes. Additional indexes were computed for major tallow market outlets, notably use in soap, animal feeds, fatty acids, and lubricants. Due to lack of data in the earlier period, comparisons were made with the 1959-61 averages.

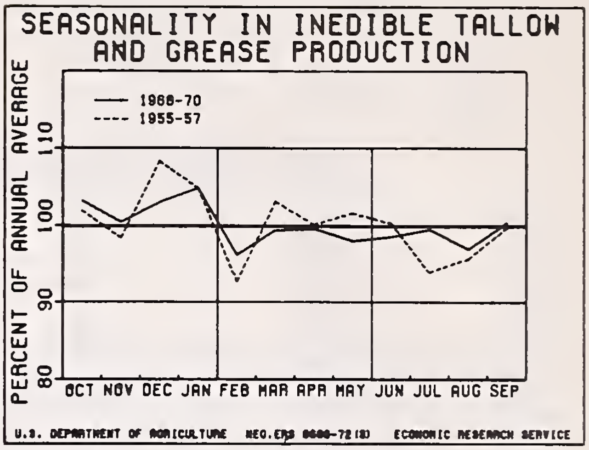
Seasonal variation for tallow production and prices is generally less pronounced than that for domestic disappearance, exports, stocks, and major end uses. This is true for the most recent period as well as earlier. The change in production is closely allied to commercial beef output and follows a somewhat similar pattern. Since beef production is relatively steady throughout the year, this partially explains the low degree of variation in production and prices. Also, tallow prices are influenced by supplies and prices of other competing fats and oils, a factor which can tend to minimize fluctuations.

Inedible Tallow Production

The month-to-month variation in tallow production is relatively small. As would be expected, it bears a striking resemblance to patterns of commercial beef production. Over the years, the movements have been smoothed somewhat, due no doubt to a more even flow of cattle slaughter and beef output. However, the basic pattern is little changed from that of the mid-1950's. Typically, the high period is during the autumn and early winter, with output reaching a seasonal high around January. Output then drops to a seasonal low around February before rising slightly and then leveling off over the rest of the marketing year. The relatively low production rate in February partially reflects fewer days of cattle slaughter. In the earlier period, production peaked a month earlier or in December, and reached a low in February, the same as today.

Tallow production now varies less seasonally than it used to, due partially to more uniform beef production. Variations between monthly peaks and troughs range about 9 percentage points, compared with about 16 in the earlier period (annual average=100).

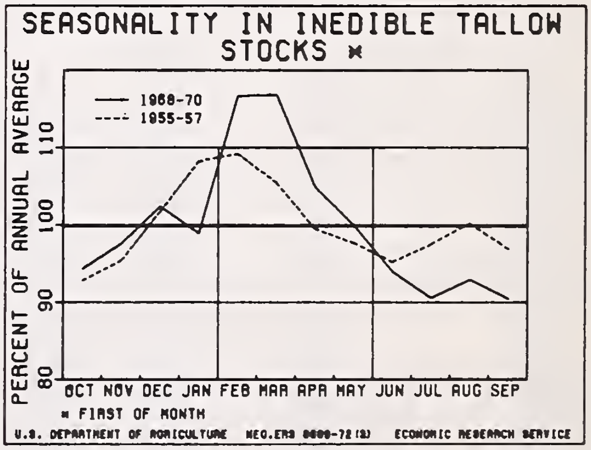




Stocks

Fluctuations for first-of-month tallow stocks exhibit a pronounced seasonal pattern. This pattern is still similar to that of the earlier period but the magnitude of change has widened somewhat. Stocks typically rise in the fall of the year when production is increasing and reach a peak in late winter, or around February-March. This is roughly the same movement as in the earlier period. Stocks then decline sharply, and hit a seasonal low around September, a little earlier than previously.

The seasonal variation in stocks is now somewhat larger than formerly. The range between the peaks and troughs is about 26 percentage points, compared with about 16 earlier. It may be that changed patterns in the domestic use and exports of inedible tallow are partly responsible for the increased variation.



Domestic Disappearance

The monthly variation in domestic disappearance is moderately pronounced and the pattern has changed some from the earlier period. It reaches a high in

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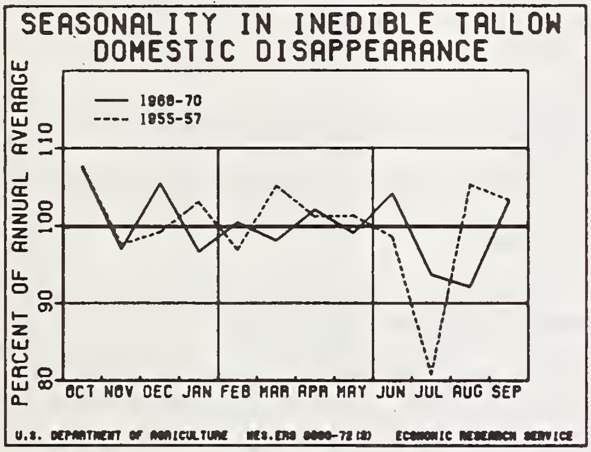
[2] The X-11 Variant of the Census Method II Seasonal Adjustment Program, Tech. Paper No. 15; J. Shiskin, A. H. Young and J. C. Musgrove, Bureau of the Census, Feb. 1967.

October, the same as formerly, and then follows a rather irregular movement over the rest of the marketing year. It is characterized by a deep trough in summer. The seasonal low is in August, about a month later than in the earlier period. The changed pattern from earlier years may be due to the shift in the end uses of tallow, that is, a change in the volume used by an industry would tend to alter the seasonal pattern. Over the last 20 years, a dramatic shift occurred out of use in soap and into animal feeds and fatty acids.

Month-to-month fluctuations now tend to be smaller than in the earlier years. The range between the peaks and the troughs is around 15 percentage points. In the mid-1950's, the range was 27 points.


SEASONALITY IN INEDIBLE TALLOW DOMESTIC DISAPPEARANCE

U.S. DEPARTMENT OF AGRICULTURE NEG.ERS 8880-72 (2) ECONOMIC RESEARCH SERVICE

Exports

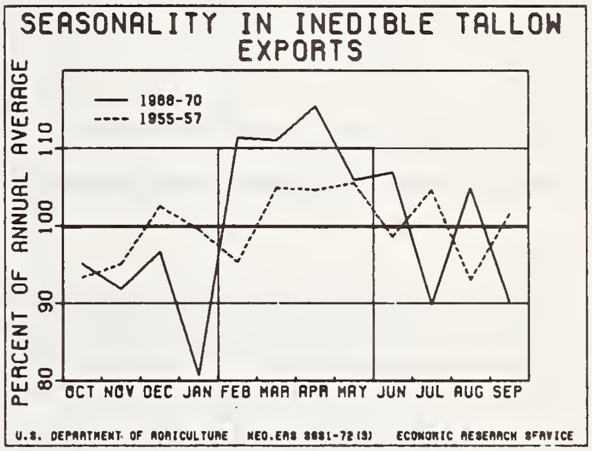
Exports vary more than any of the series studied. Variation is much larger than previously and the pattern has changed considerably. Exports now reach a seasonal low in January and then rise sharply to a peak in April. Formerly exports peaked in May and reached a low in the months of August and October. Expanding exports and the opening of new markets probably were factors which contributed to the alteration of the seasonal pattern.

Today, variations between monthly peaks and troughs range about 35 percentage points, compared with about 13 points formerly. This is the largest change from previous years of any of the series.

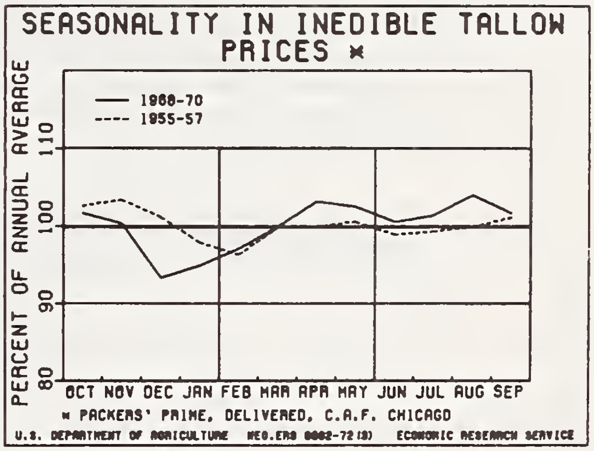
Prices

Inedible tallow prices (prime, c.a.f. Chicago) vary the least of any of the data series studied, except for production. The rather even flow of tallow production and the competition from other fats and oils probably are important factors influencing the movements. The pattern still resembles that of earlier years but the fluctuation has increased a little. Today, prices hit their low in late autumn, or around December, when both production and monthly stocks are increasing. This is several months sooner than in earlier years. Prices then rise into spring as production levels off and monthly stocks begin to decline. Following a shallow dip in early summer, prices peak around August, several months earlier than in the previous period.

The seasonal variation in tallow prices has widened a little over previous years, but the range is still relatively small. The high-low range is about 11 percentage points, compared with 7 points formerly.


SEASONALITY IN INEDIBLE TALLOW EXPORTS

U.S. DEPARTMENT OF AGRICULTURE NEG.ERS 8881-72 (3) ECONOMIC RESEARCH SERVICE


SEASONALITY IN INEDIBLE TALLOW PRICES *

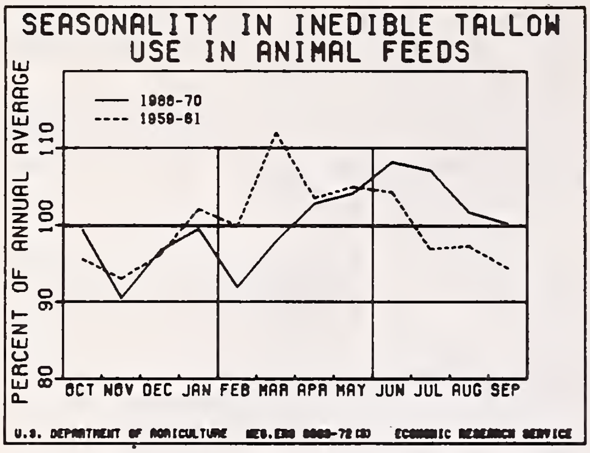
* PACKERS' PRIME, DELIVERED, C.A.F. CHICAGO

U.S. DEPARTMENT OF AGRICULTURE NEG.ERS 8882-72 (3) ECONOMIC RESEARCH SERVICE

Use in Animal Feeds

Month-to-month fluctuations of tallow used in animal feeds vary more than production and domestic use. Also, the pattern differs from that of the early 1960's. The seasonal low is usually in November, followed by another near low in February. Thereafter use rises steeply, reaching a peak around June before tapering off into summer. In the previous period, the low also was in November, but the peak occurred in March, several months earlier than today.

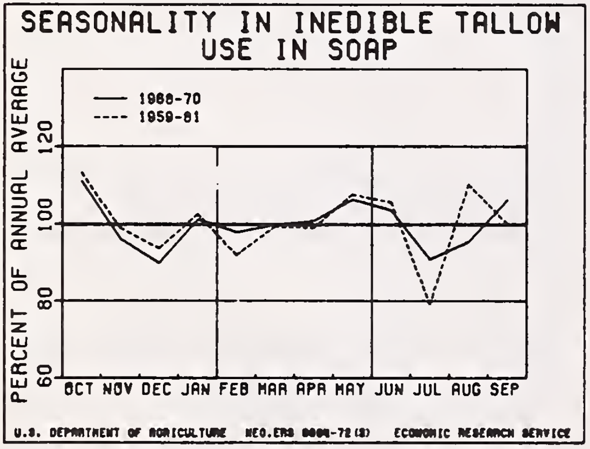
The use of tallow in animal feeds has grown markedly, from less than 500 million pounds in 1959/60 to over 1.1 billion in 1970/71. No doubt this growth is partly responsible for the changed seasonal pattern. The range in variation is virtually the same as in the earlier period, or about 18 percentage points.



Use in Soap

The use of tallow in soap also varies considerably. The pattern still resembles that of the previous period but is a little less pronounced. It is characterized by a peak in October, with deep troughs in December and July.

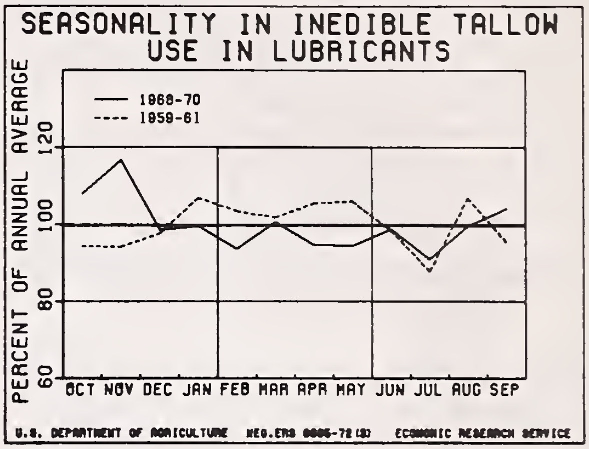
The variations are smaller now than a decade ago. The range between the peaks and troughs is 21 percentage points, compared with 34 points in the previous period. Formerly, the trough in July was much deeper. The troughs during this time of the year probably are associated with peak vacation periods and a slowdown in factory operations.



Use in Lubricants

The variations of tallow used in lubricants are rather pronounced and quite different from the earlier period. The peak month is November, followed by an irregular decline to a seasonal low in July. Formerly, the pattern was characterized by peaks in January, May, and August, with the low in July. The change in the seasonal pattern may be due to use of tallow in new products and by different or new firms.

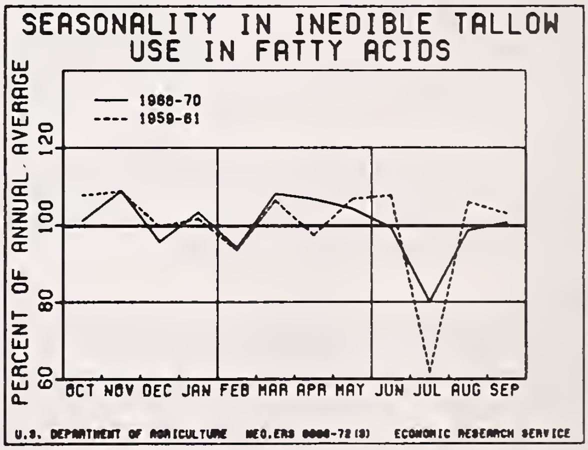
The range from high to low is about 26 percentage points, compared with 19 points earlier. However, the peak is much higher now while the trough is not quite as deep. Again, the low in July is probably associated with vacation time and a slowdown in production operations.



Fatty Acids

Tallow used in fatty acids manufacture exhibits wide variation. The pattern is still similar to the earlier years except for the spring period and there is less variation during the summer. Two peak periods, one in November and one in March, characterize the series, followed by a steep decline into July.

The high-low swing is now much smaller than formerly, due to a smaller trough in summer. The range is 29 percentage points, compared with 47 points formerly. As with soap and lubricants, the deep low in July is probably influenced by summer vacations.



Measure of Variation

The variation in the original series is the composite variation of the seasonal, trend-cycle, and irregular variations. The relative contributions to month-to-month variations from these specified components are shown in

Table 22.--Indexes of seasonal variation for selected inedible tallow and grease components 1/

Item	October	November	December	January	February	March	April	May	June	July	August	September
	--- Percent of annual average --											
Commercial beef production												
1955-57	109.6	97.8	97.4	107.7	90.1	94.2	93.2	100.3	99.8	104.3	102.2	104.2
1968-70	108.4	95.4	97.7	105.0	92.9	98.1	97.3	98.8	101.6	101.2	100.2	103.2
Inedible tallow production												
1955-57	101.9	98.4	108.3	104.8	92.7	103.1	100.1	101.6	100.3	93.9	95.7	99.7
1968-70	103.2	100.4	103.0	104.8	96.2	99.4	99.6	98.0	98.6	99.5	96.9	100.3
Tallow stocks, first of month												
1955-57	92.8	95.4	101.7	108.2	109.2	105.5	99.5	97.7	95.2	97.5	100.2	96.9
1968-70	94.3	97.6	102.4	98.9	116.7	116.8	104.9	100.0	94.0	90.6	92.9	90.4
Domestic disappearance												
1955-57	107.7	97.6	99.2	103.1	96.9	105.2	101.2	101.3	98.6	80.8	105.3	103.3
1968-70	107.4	97.0	105.5	96.7	100.4	98.1	102.1	99.1	104.2	93.7	92.1	103.2
Exports												
1955-57	93.3	95.1	102.5	99.5	95.3	104.9	104.6	105.5	98.6	104.6	93.0	101.5
1968-70	95.1	91.8	96.7	80.7	111.3	111.0	115.4	105.9	106.9	89.8	104.9	90.2
Prices 2/												
1955-57	102.6	103.4	101.2	97.9	96.3	99.8	99.9	100.6	98.9	99.3	99.9	101.1
1968-70	101.7	100.3	93.3	94.9	97.1	99.9	103.2	102.5	100.6	101.4	104.0	101.7
Use in animal feeds												
1959-61	95.6	93.0	96.1	102.1	99.9	112.0	103.5	105.0	104.3	96.9	97.3	94.4
1968-70	99.3	90.5	96.7	99.5	91.9	97.9	102.8	104.2	108.2	107.1	101.7	100.2
Use in soap												
1959-61	113.2	99.0	93.6	102.5	91.9	99.3	99.0	107.6	105.7	79.2	110.2	100.1
1968-70	111.0	96.1	89.8	101.2	97.9	99.9	100.9	106.3	103.5	90.9	95.3	106.2
Use in lubricants												
1959-61	94.3	94.2	97.6	106.9	103.5	101.8	105.5	106.0	98.4	87.9	106.9	95.5
1968-70	108.0	116.6	98.6	99.7	93.7	100.6	94.7	94.5	98.9	91.0	99.6	104.1
Use in fatty acids												
1959-61	107.7	108.7	99.7	101.6	93.5	106.3	97.4	106.7	107.6	61.9	106.0	103.0
1968-70	101.2	108.8	95.6	103.3	94.1	108.1	106.7	104.1	99.4	80.0	98.6	100.6

1/ Annual averages (equal 100) were computed from monthly data for marketing year. Stable seasonality at the 1% level indicated by the "F" value for all series except for use of tallow in lubricants.
2/ Tallow, inedible, packers' prime, average price per pound, delivered, c.a.f., Chicago.

the table. A measure of variation describes the series being adjusted according to these components and shows their relationship. This information makes possible an evaluation of the adjustment performed and a rough judgment of its usefulness in analyzing and forecasting business conditions.

The table indicates that the relative contribution of seasonal variations to month-to-month variations of inedible tallow ranges widely, from a high of nearly 70 percentage points for use of tallow in soap and fatty acids to a low of 22-24 points for exports and prices. On the other hand, the contribution of irregular variation, or those factors other than seasonal or trend-cycle, shows a rather consistent high percentage. As would be expected, the trend-cycle shows very little contribution, except for prices.

Inedible tallow is one of many products making up the large and complex U.S. fats and oils economy. Because these commodities are highly competitive and easily substitutable for each other in many industrial uses, shifts in supply and demand of an individual commodity usually have repercussions throughout the industry. The big influence of the irregular component may be partly explained by these relationships.

Inedible tallow production and use: Relative contribution of specified components to variations

Item	Seasonal[1]	Trend cycle[2]	Irregular[3]	Item	Seasonal[1]	Trend cycle[2]	Irregular[3]
	Percent	*Percent*	*Percent*		*Percent*	*Percent*	*Percent*
Inedible tallow:				Use in end products:			
Production	31	1	68				
Stocks[4]	47	8	45	Animal Feeds	36	7	57
Domestic disappearance	49	(6)	50	Soap	68	(6)	32
Exports	22	1	77	Lubricants	28	2	70
Prices[5]	24	26	50	Fatty acids	69	(6)	30

[1] Seasonal or month-to-month variations repeated year after year or developed into different patterns over a period of years. [2] The relative influence of trends or cycles. [3] Factors which include all influences other than seasonal or trend-cycle. [4] Factory and warehouse stocks, first of month. [5] Packers' prime, delivered, c.a.f., Chicago. [6] Less than 0.5 percent.

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Table 23.--Domestic disappearance of food and nonfood fats and oils, by end products, total and per person, year beginning October by quarters, with comparisons, 1969 to date

Year and Quarter	Unit	Food							Nonfood				All products (fat content)
		Butter (actual weight)	Margarine (actual weight)	Lard (direct)	Baking and frying fats (shortening)	Salad and cooking oils	Other edible 1/	Total (fat content)	Soap 2/	Drying oils 3/	Other 4/	Total	
1969-70													
Oct.-Dec.:													
Total	Mil. lb.	306	592	252	943	732	122	2,767	100	172	1,106	1,378	4,145
Per person	Lb.	1.5	2.9	1.2	4.6	3.6	.6	13.6	.5	.8	5.4	6.8	20.4
Jan.-Mar.:													
Total	Mil. lb.	296	583	235	923	774	138	2,779	184	150	937	1,271	4,049
Per person	Lb.	1.5	2.9	1.2	4.5	3.8	.7	13.6	.9	.7	4.6	6.2	19.8
Apr.-June:													
Total	Mil. lb.	246	496	251	842	791	144	2,624	193	161	976	1,330	3,953
Per person	Lb.	1.2	2.4	1.2	4.1	3.9	.7	12.8	.9	.8	4.8	6.5	19.3
July-Sept.:													
Total	Mil. lb.	257	538	188	885	766	127	2,603	187	182	1,025	1,394	3,997
Per person	Lb.	1.3	2.6	.9	4.3	3.7	.6	12.7	.9	.9	5.0	6.8	19.5
Season:													
Total	Mil. lb.	1,106	2,209	927	3,593	3,063	532	10,773	664	664	4,044	5,373	16,145
Per person	Lb.	5.4	10.8	4.5	17.6	15.0	2.6	52.8	3.3	3.3	19.8	26.3	79.1
1970-71 5/													
Oct.-Dec.:													
Total	Mil. lb.	306	607	265	907	822	131	2,862	123	134	1,084	1,342	4,204
Per person	Lb.	1.5	3.0	1.3	4.4	4.0	.6	13.9	.6	.7	5.3	6.5	20.4
Jan.-Mar.:													
Total	Mil. lb.	273	581	241	891	773	124	2,715	195	143	889	1,228	3,943
Per person	Lb.	1.3	2.8	1.2	4.3	3.7	.6	13.2	.9	.7	4.3	6.0	19.1
Apr.-June:													
Total	Mil. lb.	259	536	197	829	825	123	2,609	205	151	1,007	1,363	3,973
Per person	Lb.	1.3	2.6	1.0	4.0	4.0	.6	12.6	1.0	.7	4.9	6.6	19.2
July-Sept.:													
Total	Mil. lb.	238	526	251	887	812	107	2,669	179	202	985	1,366	4,035
Per person	Lb.	1.1	2.5	1.2	4.3	3.9	.5	12.9	.9	1.0	4.8	6.6	19.5
Season:													
Total	Mil. lb.	1,075	2,250	956	3,514	3,232	485	10,856	703	631	3,965	5,299	16,155
Per person	Lb.	5.2	10.9	4.6	17.0	15.6	2.3	52.5	3.4	3.1	19.2	25.6	78.2
1971-72 5/													
Oct.-Dec.:													
Total	Mil. lb.	297	622	197	882	831	125	2,773	104	129	1,103	1,336	4,109
Per person	Lb.	1.4	3.0	.9	4.2	4.0	.6	13.3	.5	.6	5.3	6.4	19.8
Jan.-Mar.:													
Total	Mil. lb.												
Per person	Lb.												
Apr.-June:													
Total	Mil. lb.												
Per person	Lb.												
July-Sept.:													
Total	Mil. lb.												
Per person	Lb.												
Season:													
Total	Mil. lb.												
Per person	Lb.												

1/ Includes all food fats and oils used other than butter, lard, margarine, shortening and cooking and salad oils.

2/ Fat equivalent of soap used in synthetic rubber is included in "other industrial products". Adjusted for foreign trade and changes in stocks.

3/ Paints, varnishes, floor coverings, oilcloth, printing inks, core oils, synthetic resins, insulation, linings, packings, coated fabrics, caulking and other protective coatings.

4/ Includes use of fats and oils in chemicals, lubricants and greases, animal feeds, fatty acids, tin and terne plate, pharmaceuticals, leather, candles, synthetic organic detergents, toilet articles, and miscellaneous industrial products.

5/ Preliminary.

Table 24.--Fats and oils (including their products) and oilmeals: Production from domestic and imported materials, and factory and warehouse stocks at end of month

Item	Production						Stocks			
	October-January		1971			1972	1971			1972
	1970-71	1971-72	Jan.	Nov.	Dec.	Jan.	Jan. 31	Nov. 30	Dec. 31	Jan. 31
PRIMARY FATS AND OILS					Million pounds					
Food fats and oils										
Butter (creamery)	357.5	347.9	103.8	78.3	88.7	101.5	119.3	155.0	96.8	79.1
Lard (commercial)	737.0	609.0	176.6	168.0	162.0	131.0	90.7	82.4	99.9	77.9
Beef fats	191.4	174.9	50.2	44.6	45.4	42.4	47.0	36.7	41.3	41.5
Total edible animal fats	1,285.9	1,131.8	330.6	290.9	296.1	274.9	257.0	274.1	238.0	198.5
Corn oil	154.8	155.2	38.0	40.7	33.4	38.7	39.6	69.6	57.1	57.1
Cottonseed oil	591.9	565.9	151.5	149.0	154.0	151.1	202.3	159.5	188.3	235.7
Palm oil	---	---	---	---	---	---	40.2	54.6	39.9	58.9
Peanut oil	83.5	101.5	25.4	25.4	26.5	28.5	18.3	21.7	16.2	17.3
Soybean oil	2,887.9	2,669.9	724.8	644.2	690.6	689.9	751.8	808.7	802.2	799.9
Safflower oil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	20.1	25.7	29.1	26.9
Total edible vegetable oils	3,718.1	3,492.5	939.7	859.3	904.5	908.2	1,072.3	1,139.8	1,132.8	1,195.8
Soap fats and oils										
Tallow, inedible, and greases	1,694.0	1,651.1	422.7	406.4	438.5	396.3	423.5	397.4	379.7	417.0
Fish and marine oil 1/	31.1	25.8	1.4	6.0	1.6	1.4	72.0	147.2	134.9	96.6
Coconut oil	D	D	D	D	D	D	161.8	110.2	103.9	161.8
Total soap fats	1,725.1	1,676.9	424.1	412.4	440.1	397.7	657.3	654.8	618.5	675.4
Drying oils										
Castor oil 1/	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	118.5	75.6	69.4	69.4
Linseed oil	117.0	140.4	31.9	32.3	33.3	38.2	157.5	210.8	224.9	236.7
Tall oil	419.0	421.6	107.5	105.8	97.3	113.0	129.0	152.3	158.1	153.1
Tung oil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	48.1	43.0	44.7	44.7
Total drying oils	536.0	562.0	139.4	138.1	130.6	151.2	453.1	481.7	497.1	503.9
Grand total	7,265.1	6,863.3	1,833.8	1,700.8	1,771.2	1,732.2	2,439.7	2,550.4	2,486.4	2,573.6
From domestic materials	7,265.1	6,863.3	1,833.8	1,700.8	1,771.2	1,732.2				
From imported materials	D	D	D	D	D	D				
FAT-AND-OIL PRODUCTS										
Cooking and salad oils										
Total	1,159.8	1,155.2	283.9	265.3	308.4	304.9	74.4	74.5	76.1	81.8
Soybean	826.0	882.4	205.6	199.7	233.5	236.7	56.9	57.9	58.4	60.7
Other	333.8	272.8	78.3	65.7	74.8	68.2	17.5	16.6	17.7	21.1
Baking and frying fats (shortening)										
Total	1,212.6	1,176.3	291.5	306.5	290.1	278.3	134.7	118.8	127.6	124.9
100% vegetable oil	815.3	785.8	195.5	200.2	194.4	188.1	102.2	90.4	98.5	99.2
100% animal fats or blends of vegetable oil and animal fats	397.3	390.4	96.0	106.4	95.7	90.1	32.5	28.4	29.1	25.7
Margarine										
Total	817.7	825.5	212.9	210.1	219.4	207.7	50.4	60.7	57.1	68.9
Soft	161.2	171.6	42.9	49.8	42.8	39.7	---	---	---	---
1 pound units	733.0	715.1	195.7	180.9	191.4	182.5	---	---	---	---
All other	84.7	110.3	17.2	29.2	28.0	25.3	---	---	---	---
Fatty Acids	374.4	377.5	91.3	93.9	90.2	93.1	134.6	129.1	111.6	101.5
Glycerine (Natural and synthetic)	114.9	108.7	27.7	28.6	26.5	25.9	52.8	45.2	48.1	39.3
Meat Meal and Tankage	1,385.6	1,298.3	334.4	326.7	343.3	304.9	---	---	---	---
OILSEED CAKE AND MEAL						Thousand tons				
Soybean (including hull meal)	6,336.1	5,841.1	1,605.4	1,408.7	1,519.4	1,507.1	185.5	192.8	144.3	153.9
Cottonseed	847.3	802.6	215.8	208.9	219.8	212.7	103.2	99.5	93.1	103.6
Linseed	106.4	127.3	28.6	29.7	30.8	34.9	9.2	3.7	5.5	8.4
Peanut	58.3	66.6	17.1	16.4	17.5	19.5	4.2	4.8	2.2	2.4
Copra	D	D	D	D	D	D	D	D	D	D
Other	D	10.9	D	D	D	D	12.1	29.3	24.8	20.7
Total oilmeals	7,348.1	6,848.5	1,866.9	1,663.7	1,787.5	1,774.2	314.2	330.1	269.9	289.0

1/ Stocks include GSA stockpile.
N.A.--Not available. D. Census disclosure.
SOURCE: Bureau of Census, except butter.

Table 25.--Imports and exports of fats, oils, oil-bearing materials, fat-and-oil products (in terms of oil) and oilmeals

Item	Imports for consumption					Exports 1/				
	Oct.-Jan.		1971		1972	Oct.-Jan.		1971		1972
	1970-71	1971-72	Nov.	Dec.	Jan.	1970-71	1971-72	Nov.	Dec.	Jan.
	Million pounds									
Food fats and oils										
Butter	1.7	1.6	2/	2/	1.6	.1	91.8	18.5	43.5	17.8
Lard	---	.2	2/	---	---	110.2	72.8	38.2	3.9	18.6
Beef fats	2/	2/	2/	2/	---	5.2	3.4	1.4	.2	.8
Total, edible animal fats	1.7	1.8	2/	2/	1.6	115.5	168.0	58.1	47.6	37.2
Corn oil	2/	---	---	---	---	4.7	3.9	.8	1.1	1.1
Cottonseed oil	---	---	---	---	---	111.9	121.0	36.3	58.5	23.1
Cottonseed (17 percent)	---	---	---	---	---	1.5	.4	.2	.2	2/
Olive oil, edible	20.7	15.4	2.0	4.2	5.4	---	---	---	---	---
Palm oil	72.2	123.4	37.6	17.6	42.3	---	---	---	---	---
Peanut oil	2/	2/	2/	---	2/	8.6	34.6	16.4	12.8	5.1
Peanuts, shelled (43.5 percent)	---	---	---	---	---	6.6	30.4	3.4	6.9	19.4
Soybean oil	---	2/	---	2/	---	494.7	531.0	46.8	157.0	184.3
Soybeans (18.3 percent)	2/	2/	2/	2/	2/	1,884.0	1,864.5	520.9	552.8	466.9
Safflower seed (36 percent)	---	---	---	---	---	22.5	39.3	13.0	11.5	---
Other vegetable oils	6.2	5.1	1.0	1.3	1.9	3.1	5.8	.3	1.9	1.8
Total, edible vegetable oils	99.1	143.9	40.6	23.1	49.6	2,537.6	2,630.9	638.1	802.7	701.7
Soap fats and oils										
Tallow, inedible	3.4	.6	.2	.1	.1	746.8	797.2	195.4	215.0	189.3
Greases	2/	---	---	---	---	77.4	60.3	17.3	14.2	15.6
Fish and fish liver oils non-medicinal	2/	.2	---	---	2/	56.0	63.8	21.6	23.4	14.2
Marine mammal oils	17.6	16.3	7.7	4.7	4.0	---	---	---	---	---
Olive oil, inedible	.1	.1	2/	2/	.1	---	---	---	---	---
Total, slow-lathering oils	21.1	17.2	7.9	4.8	4.2	880.2	921.3	234.3	252.6	219.1
Babassu oil	---	---	---	---	---	---	---	---	---	---
Coconut oil	219.4	134.2	28.2	16.1	22.0	3.5	8.4	2.0	3.8	.6
Copra (64 percent)	107.3	124.3	30.2	49.2	---	---	---	---	---	---
Palm kernel oil	34.4	28.4	9.1	7.9	10.9	---	---	---	---	---
Total, lauric-acid oils	361.1	286.9	67.5	73.2	32.9	3.5	8.4	2.0	3.8	.6
Drying oils										
Flaxseed (36.1 percent)	2/	2/	---	2/	---	33.6	.1	2/	.1	---
Linseed oil	2/	2/	2/	2/	---	24.0	11.4	1.3	.1	.1
Oiticica oil	.7	.6	2/	---	.6	---	---	---	---	---
Tall oil	---	---	---	---	---	52.3	52.1	2.3	18.9	21.9
Tung oil	8.0	4.6	.8	1.4	1.8	.5	.7	.1	.1	.2
Total	8.7	5.2	.8	1.4	2.4	110.4	64.3	3.7	19.2	22.3
Other industrial oils and fats										
Castor oil	31.2	14.1	1.1	1.9	7.2	---	---	---	---	---
Fish-liver oils, medicinal	3.9	2.4	.6	.7	.6	---	---	---	---	---
Rapeseed oil	3.2	2.9	.7	1.0	.6	---	---	---	---	---
Wool grease	3.3	3.1	.2	1.2	1.4	---	---	---	---	---
Other vegetable oils and fats, inedible	3.6	2.2	2/	.6	1.4	33.0	47.0	11.7	20.5	5.8
Total	45.2	24.7	2.6	5.4	11.2	33.0	47.0	11.7	20.5	5.8
Products										
Margarine (fat content)	---	---	---	---	---	.9	1.1	.3	.1	.6
Shortening	---	---	---	---	---	7.7	6.4	1.6	1.6	1.7
Salad products (fat content)	---	---	---	---	---	3.0	3.1	.8	.9	.9
Soap (fat content)	.8	.6	2/	.2	.2	3.1	2.7	.4	.9	.8
Fatty acids	2.3	1.1	2/	.3	.5	36.9	40.0	2.7	17.3	12.9
Total	3.1	1.7	2/	.5	.7	51.6	53.3	5.8	20.8	16.9
Grand total	539.9	481.6	119.6	108.6	102.4	3,732.1	3,893.3	953.9	1,166.9	1,003.3
Glycerine	---	.4	---	---	.4	17.7	22.2	3.9	3.2	5.5
Oilseed Cake and Meal:	Thousand tons									
Soybean	---	---	---	---	---	1,507.1	1,400.7	301.1	555.4	387.3
Cottonseed	---	.1	---	---	.1	3.1	.2	---	---	---
Linseed	.5	1.1	.2	.3	.3	36.1	36.7	17.3	3.8	---
Copra	---	---	---	---	---	---	---	---	---	---
Corn	---	---	---	---	---	.9	3.2	.5	1.5	.7
Other	.6	2.2	.8	.4	.7	35.5	42.2	13.9	11.8	12.9
Total oilmeals	1.1	3.4	1.0	.7	1.1	1,582.7	1,483.0	332.8	572.5	400.9

1/ Includes re-exports and foreign donations but not shipments to U.S. Territories. 2/ Less than 50,000 pounds.
SOURCE: Bureau of Census.

Table 26.--Index numbers of wholesale prices of fats and oils 1/

Item	1967=100				
	January		1971		1972
	1970	1971	November	December	January
All fats and oils	108	118	117	112	109
All fats and oils, except butter	111	126	127	117	114
Grouped by origin:					
Animal fats	114	115	115	110	109
Vegetable oils, domestic	95	122	126	116	112
Vegetable oils, foreign	126	125	96	94	94
Grouped by use:					
Butter	101	104	102	102	102
Lard	142	122	136	125	123
Lard, refined	124	99	117	112	113
Food fats other than butter	108	124	131	120	117
Food fats other than butter and lard	98	125	129	119	115
All edible fats and oils	104	114	116	111	109
Soap fats	119	136	126	116	111
Drying oils	97	98	96	91	91
Other industrial	116	124	112	101	99
All industrial	116	130	121	112	108
Edible vegetable oils, grouped by degree of processing:					
Crude	96	125	129	118	114
Refined	106	141	130	123	121
End products	105	119	123	122	122
Margarine	106	119	121	122	122
Shortening, 3 lb. tin	106	120	126	126	124
Shortening, 440 lb. drum	105	118	123	118	118

1/ The year 1967 has been established as the new standard reference base period for general purpose index numbers prepared by Federal agencies. Index numbers based on 1967=100 were converted from the indexes based on 1957-59=100 previously published in this report.

Table 27.--Prices received by farmers and prices at terminal markets for specified oil-bearing materials and oilmeals

Item	Unit	February		1971	1972	
		1970	1971	December	January	February
				-- Dollars --		
OILSEEDS						
Copra, Philippines, c.i.f. Pacific Coast	Short ton	204.37	---	---	---	---
Cottonseed, United States average	Short ton	47.00	58.90	56.90	54.50	54.30
Flaxseed, No. 1, Minneapolis	Bushel	2.90	2.62	2.71	2.70	2.74
Flaxseed, United States average	Bushel	2.62	2.33	2.37	2.41	2.42
Peanuts, United States average (farmers' stock)	100 lb.	12.10	12.00	13.90	---	---
Peanuts, Virginias' No. 1, shelled, Va.-N.C. 1/	100 lb.	21.62	22.00	23.38	23.62	23.75
Peanuts, Runners No. 1, shelled, Southeast 1/	100 lb.	22.25	21.38	23.12	23.25	23.38
Peanuts, Spanish No. 1, shelled, Southeast 1/	100 lb.	22.12	21.50	23.12	23.38	23.50
Peanuts, Spanish No. 1, shelled, Southwest 1/	100 lb.	22.12	21.75	23.12	23.38	23.50
Soybeans, No. 1, Yellow, Chicago	Bushel	2.59	3.06	3.08	3.09	3.18
Soybeans, No. 1, Yellow, Illinois country shipping points	Bushel	2.46	3.01	3.06	3.05	3.14
Soybeans, United States average	Bushel	2.40	2.92	2.93	2.92	3.00
OILMEALS (bulk)						
Copra meal, 20 percent protein, Los Angeles	Short ton	78.00	---	---	---	---
Cottonseed meal, 41 percent protein, Memphis	Short ton	74.50	73.60	74.80	75.70	74.40
Cottonseed meal, 41 percent protein, Chicago	Short ton	88.50	85.90	84.60	85.90	84.70
Cottonseed meal, 41 percent protein, Atlanta	Short ton	80.50	75.60	80.10	79.30	79.60
Cottonseed meal, 41 percent protein, Ft. Worth	Short ton	88.75	84.00	84.10	86.00	83.20
Fish meal, 60 percent protein, bulk, New York 2/	Short ton	185.50	178.75	159.50	162.50	161.80
Fish meal, 60 percent protein, bulk, Los Angeles 3/	Short ton	170.00	150.00	135.00	154.30	156.00
Linseed meal, 34 percent protein, Minneapolis	Short ton	76.40	63.50	65.00	67.10	66.20
Linseed meal, 34 percent protein, New York	Short ton	96.25	88.60	N.A.	N.A.	N.A.
Peanut meal, 50 percent protein, f.o.b. Southeastern mills	Short ton	81.75	76.75	73.00	73.60	75.00
Safflower meal, 20 percent solvent, San Francisco	Short ton	38.75	45.00	37.00	37.25	36.20
Soybean meal, 44 percent protein, Chicago	Short ton	90.25	82.60	86.60	88.60	91.00
Soybean meal, 44 percent protein, Decatur	Short ton	85.25	77.50	80.60	82.60	84.80
Soybean meal, 44 percent protein, Atlanta	Short ton	93.70	88.00	88.50	90.20	93.40
Soybean meal, 44 percent protein, Memphis	Short ton	87.50	80.20	82.75	86.40	86.70
Soybean meal, 50 percent protein, Decatur 4/	Short ton	95.60	82.40	88.50	89.40	91.50
Soybean meal, 50 percent protein, Memphis 4/	Short ton	99.25	87.50	94.20	95.40	96.30
Soybean meal, 50 percent protein, Atlanta 4/	Short ton	104.20	94.20	97.50	99.70	101.80

1/ This price applies to peanuts for edible uses. 2/ Beginning July 1971, quoted as 65% protein, East Coast. 3/ Beginning January 1972, quoted as 65% protein. 4/ 49 to 50 percent protein. N.A.--Not available.

Compiled from Chemical Marketing Reporter (formerly OPD Reporter), Wall Street Journal, Chicago edition, reports of the Statistical Reporting Services, and the Consumer Marketing Service.

Table 28.--Wholesale and retail prices per pound for fats and oils

Item	February		1971	1972	
	1970	1971	December	January	February
			-- Cents --		
Wholesale Prices					
Butter, creamery, Grade A, (92-score) bulk, New York	68.9	70.8	69.2	68.9	68.8
Butter, creamery, Grade A, (92-score) bulk, Chicago	67.6	69.8	67.9	67.8	67.8
Butter, creamery, Grade A, (92-score) prints, San Francisco	82.3	85.8	83.8	83.8	83.8
Castor oil, dehydrated, tanks, New York	28.0	27.0	29.0	29.0	29.0
Castor oil, No. 1, Brazilian, tanks, imported, New York	14.4	17.8	17.5	20.1	20.5
Coconut oil, crude, tank cars, Pacific Coast, 1/	16.2	14.5	11.2	10.6	9.9
Coconut oil, crude, tanks, f.o.b. New York	16.9	15.5	12.2	11.7	10.9
Coconut oil, refined, tanks, l.c.l., New York	17.2	17.5	13.9	12.9	11.7
Cod oil, spot, drums, New York	8.0	---	---	---	---
Codliver oil, medicinal, U.S.P., barrels, New York	19.5	21.5	22.8	22.8	22.8
Corn oil, crude, tank cars, f.o.b. Midwest mills	16.4	27.5	18.0	18.0	17.3
Corn oil, crude, tanks, New York	16.4	25.6	N.A.	N.A.	N.A.
Corn oil, refined, tanks, New York	19.9	28.9	20.8	20.3	20.0
Cottonseed oil, crude, tank cars, f.o.b., S.E. mills	12.1	16.1	13.9	13.4	13.5
Cottonseed oil, crude, tank cars, f.o.b., Valley	11.9	16.0	13.4	12.8	12.2
Cottonseed oil, crude, tank cars, f.o.b., Texas	11.8	15.9	13.2	13.0	12.9
Cottonseed oil, refined, tanks, New York	16.0	20.2	17.8	17.1	16.5
Degras, Lanolin technical, drums, New York	22.0	40.0	47.0	53.0	53.0
Glycerine, synthetic, refined, 99.5%, tanks, delivered, New York	20.8	22.0	23.0	23.0	23.0
Glycerine, natural, refined, USP. 99%, tanks, delivered, New York	20.6	20.6	22.6	22.6	22.6
Grease, A white, tank cars, delivered Chicago	7.3	8.0	6.5	6.4	6.4
Grease, B white, delivered, Chicago	6.5	7.3	5.4	5.6	5.4
Grease, yellow, delivered, Chicago	6.4	7.0	5.5	5.2	5.2
Grease, white, choice, tanks, New York	5.0	8.2	6.1	6.4	6.0
Grease oil, extra No. 1, drums, Chicago	13.4	13.4	15.2	15.2	15.2
Lard, loose, tank cars, Chicago	11.7	10.0	9.8	9.6	11.3
Lard, prime steam, tierces, Chicago	11.6	10.9	9.6	10.1	11.4
Lard, refined, one and two pound prints, Chicago	17.4	15.0	15.3	15.4	15.4
Lard, refined, carlots, 50-lb. tins, Chicago	14.2	13.0	13.2	---	---
Linseed oil, raw, tank cars, Minneapolis	11.0	9.5	8.8	8.8	8.8
Linseed oil, raw, tanks, New York	12.2	10.7	10.2	10.2	10.2
Margarine, colored, delivered, Eastern U.S.	27.2	30.6	31.2	31.2	31.5
Margarine, yellow, quarters, f.o.b., Chicago	24.8	20.8	24.8	24.0	23.8
Margarine, white, domestic vegetable, Chicago	19.5	19.5	23.5	22.8	22.5
Menhaden oil, crude, tanks, f.o.b., Baltimore	4.5	10.3	9.0	8.3	8.3
Menhaden oil, light pressed, tanks, New York	9.5	10.5	10.5	10.5	10.5
Oiticica oil, drums, f.o.b., New York	19.5	18.0	18.5	18.5	18.5
Oiticica oil, tanks, New York	17.5	16.0	16.5	16.5	16.5
Olive oil, imported, edible, drums, New York	38.7	39.3	42.7	42.7	42.7
Palm oil, clarified, drums, f.o.b., New York	12.5	16.0	14.8	14.8	14.8
Palm oil, tankwagons, f.o.b., New York	11.2	13.5	12.6	11.8	11.8
Peanut oil, crude, tank cars, f.o.b. S.E. mills	15.5	18.2	16.8	16.1	15.4
Peanut oil, refined, tanks, New York	18.5	21.1	20.4	19.2	19.0
Rapeseed oil, refined (denatured), tanks, New York	13.8	17.5	17.5	17.5	17.5
Safflower oil, tanks, New York	15.6	18.4	18.4	18.4	18.4
Safflower oil, edible, drums, New York	22.8	27.0	27.0	27.0	27.0
Sesame oil, refined, drums, New York	35.0	39.0	39.0	39.0	39.0
Shortening, all vegetable, hydrogenated, 440-lb. drums, New York	21.8	24.5	24.5	24.5	24.5
Shortening, all vegetable, hydrogenated, 3 lb. tins, delivered, Eastern U.S.	27.9	31.6	33.0	32.5	32.5
Soybean oil, crude tank cars, f.o.b., Decatur	11.5	12.1	11.7	10.9	11.0
Soybean oil, refined, tanks, New York	13.6	14.2	12.8	12.4	12.5
Soybean oil, clarified, tanks, New York	12.0	14.4	17.8	17.8	17.8
Sperm oil, natural 45°, drums, New York	16.8	28.0	28.0	28.0	28.0
Sperm oil, bleached, winter 45°, drums, New York	18.2	29.0	29.0	29.0	29.0
Tall oil, crude, tanks, works	3.4	3.8	3.8	3.8	3.8
Tall oil, refined, tanks, works	7.5	8.5	8.5	8.5	8.5
Tallow, edible, loose, Chicago	9.6	10.0	10.3	10.0	10.8
Tallow, inedible, packers' prime, c.a.f. delivered, Chicago	6.6	7.6	5.6	5.8	5.7
Tallow, inedible, bleachable fancy, delivered, Chicago	6.9	8.2	6.0	6.2	6.0
Tallow, No. 1, inedible, delivered, Chicago	6.4	7.0	5.2	5.4	5.3
Tallow, special, inedible, tanks, delivered, New York	6.9	7.7	5.6	5.9	5.6
Tung oil, imported, drums, f.o.b., New York	23.9	26.0	15.5	15.5	15.5
Tung oil, imported, tanks, New York	22.5	15.8	11.7	11.5	11.5
Tung oil, domestic, tanks, f.o.b. mills	2/24.0	2/24.0	N.A.	N.A.	N.A.
Retail prices 3/					
Butter	85.6	87.8	87.3	87.5	87.5
Margarine	28.4	32.0	33.2	33.0	33.3
Shortening	28.6	31.7	32.6	32.8	32.9
Salad Dressing (Italian)	74.8	80.0	82.2	81.8	82.0
Peanut Butter	62.5	66.1	66.8	66.9	67.4
Cooking and Salad oils	35.6	40.9	43.4	43.8	43.8

1/ Includes 1 cent import duty.
2/ Nominal.
3/ Leading cities.

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